ICAT Initiative for Climate Action Transparency

Photo: CCAFS SEA and Leocadio Sebastian

Tracking progress on the ground: Guidance and good practices for integrating subnational and non-state actors into M&E systems for national climate change adaptation policies

UN environment programme | copenhagen climate centre

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CIFF CHILDREN'S INVESTMENT FUND FOUNDATION

Acknowledgements
We would like to thank the following for contributing to this guide by providing their experiences of implementing Initiative for Climate Action Transparency (ICAT) projects:

Ana Ovalle (ASO Consulting)
Caroline Mwongera (Alliance Biodiversity & International Center for Tropical Agriculture [CIAT])
Daleen Lötter (Council of Scientific and Industrial Research [CSIR])
Ivy Kinyua (Alliance Biodiversity & CIAT)
Pedro Coss Sanz (ASO Consulting)
Peter Kuria (African Conservation Tillage Network)
Rosalia Duval (Department of Climate Change, Government of the Dominican Republic)
Sasha Naidoo (CSIR)
Tirusha Thambiran (CSIR)
Veronica Ndetu (Ministry of Agriculture, Livestock, Fisheries and Cooperatives, Government of the Republic of Kenya)

Recommended citation
Dale, T.W., Neufeldt, H. (2023). Tracking progress on the ground: Guidance and good practices for integrating subnational and non-state actors into M&E systems for national climate change adaptation policies. Copenhagen, Denmark: UNEP Copenhagen Climate Centre and Initiative for Climate Action Transparency (ICAT).

The ICAT project is managed by the United Nations Office for Project Services (UNOPS)

UNOPS

Introduction to the document

Introduction to the guide

While national climate change adaptation policies are set by actors within the national government, achieving the objectives of these policies often relies on action from a broad and diverse coalition of subnational and non-state (SANS) actors operating at different geographic scales (Galarraga et al., 2011; Jensen et al., 2016; Duggan, 2019).

The multi-level nature of climate change adaptation means that when tracking the progress being made towards achieving the objectives of national adaptation policies, policy-owners need to take the actions of SANS actors into account. As data on these actions and their results are in the hands of their implementers, systems developed to facilitate the monitoring and evaluation (M&E) of national adaptation policies need to integrate these actors by providing them with the necessary framework, infrastructure and enabling environment that enables them to collect and supply the data they require.

This guide aims to support actors in national governments that are responsible for the M&E of national adaptation policies integrate SANS actors into the M&E systems they are developing.

It does this by describing the barriers that typically prevent SANS actors from participating in M&E systems and presenting a series of measures and good practices that those developing such systems could implement to identify and overcome these barriers.

While the primary target audience of this guide are national government actors engaged in developing M&E systems for adaptation policies, much of the guidance contained within this guide will also be applicable to subnational governments as well as actors developing M&E systems for policy areas such as development that have a similar reliance on SANS actors to provide data about policy implementation.

Structure of the guide

The guide is structured into two parts: Part I and Part II.

Part I is intended to provide readers with a basic understanding of the topics required to understand Part II. Consequently, it is targeted towards readers that have relatively little experience in developing M&E systems. As such, readers that already have expertise in developing M&E systems may find they already know a lot – if not all – of the content provided in Part I. If this is the case, readers are encouraged to skim read Part I and move quickly onto Part II.

Part I: Introduction to the topic

Part I provides readers with important background information concerning SANS actors and their role in realising national adaptation policy, M&E and M&E systems, and how the former are integrated into the latter.

Section 1 provides an introduction to SANS actors. The section describes: what SANS actors are (section 1.1), how they contribute to the realisation of national adaptation policies (section 1.2), and why they are important during the M&E of these policies (section 1.3).

Section 2 provides an introduction to M&E and M&E systems. The section introduces M&E by describing the role it plays in the policy implementation cycle (section 2.1), and introduces M&E systems by describing what they are in practice, and providing an overview of the different phases of an M&E system's lifecycle (section 2.2).

Section 3 provides an overview of elements and conditions that need to be in place for SANS actors to participate in an M&E system. The section describes: the key elements that need to be in place to integrate SANS actors into M&E systems (section 3.1), the enabling conditions that need to be in place for SANS actors to participate in M&E systems (section 3.2), and the key challenges that often prevent these conditions from being created (section 3.3).

Part II: Enhancing the conditions for subnational and non-state actor participation in M&E systems

Part II provides readers with guidance on how to successfully integrate SANS actors into government-owned M&E systems.

Section 4 provides readers with an overview of how shortfalls in capacity and motivation for participating in an M&E system can be identified during the broader process of developing the system.

Section 5 provides readers with an array of different measures and good practices that can be implemented to strengthen SANS actor participation in their M&E systems. This includes measures that strengthen SANS actor participation by reducing the burden that M&E systems place on these actors (section 5.1) and measures that can be implemented to increase the motivation of SANS actors to participate in the system (section 5.2).

BOX 1

Using the measures and good practices provided in section 5

The measures and good practices described in section 5 are designed to be applied flexibly as the extent to which they will be applicable and desirable will vary on a case-by-case basis. As such, they are intended to serve as inspiration for what sorts of steps and measures readers could implement as they develop their M&E systems. They are not intended to be viewed as steps and measures that should or must be implemented during this process.

Using this guide

This guide is intended to support the broader process of developing and operationalising an M&E system, by providing readers with guidance and actionable measures, considerations and good practices that will help them strengthen SANS actor participation in their M&E systems. It is designed to be used as supplementary material to existing guidance for developing M&E systems for policies and existing guidance for developing metrics and indicators for the M&E of adaptation. A selection of useful resources that provide guidance on conducting these processes are provided in Box 2.

BOX 2

Existing guidance for developing M&E systems and adaptation metrics and indicators

Resources providing guidance on developing M&E systems:
Mackay (2007), Görgens and Kusek (2009), and Simister (2019) are all useful guides that support M&E system development. These resources are particularly useful for those tasked with developing all aspects of the M&E systems (i.e., not just the M&E framework) as they place significant focus on how typical pitfalls associated with developing and operationalising complex M&E systems (e.g., insufficient human capacity or resistance to M&E amongst actors involved) can be avoided. Kelly-Price et al. (2015) and Rai et al. (2015) are useful guides that focus specifically on the development of national M&E systems for adaptation, though these resource are more focussed on adaptation-specific challenges such as metric and indicator development, and data aggregation.

Resources providing guidance on developing adaptation metrics and indicators:
In the last decade a number of resources have been published to support the development of adaptation metrics and indicators. Useful resources that are not sector specific include Christiansen et al. (2016) and Olivier et al. (2013). Meanwhile, Hammill et al. (2014) provides a repository of example adaptation indicators taken from existing case studies that could support indicator development and selection.

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Photo: Daniel Kawed, unsplash

Part I

Introduction to the topic

Part I is intended to provide readers with a basic understanding of the topics required to understand Part II. Consequently, it is targeted towards readers that have relatively little experience in developing M&E systems. As such, readers that already have expertise in developing M&E systems may find they already know a lot – if not all – of the content provided in Part I. If this is the case, readers are encouraged to skim read Part I and move quickly onto Part II.

1. Introduction to subnational and non-state actors

Section 1 provides readers with an introduction to subnational and non-state (SANS) actors and their role in implementing and monitoring and evaluating national adaptation policies. The section starts by defining the term "subnational and non-state actors" (section 1.1). Following this, it describes the role that these actors play in realising national adaptation policies (section 1.2) and their importance as "data providers" during the M&E of these policies (section 1.3).

1.1 What are SANS actors?

The term subnational and non-state actor is a compound term used to describe a broad actor group constituted of:

- **Subnational actors** – definable as actors that operates at any level below the national level, including the local level.
- **Non-state actors** – definable as actors that are not part of a government or state. These can include individuals, businesses, non-governmental organizations (NGOs), and other types of organizations that operate outside of the direct control or influence of a government.

SANS actors can qualify as either one or both of these categories and as such, the term can essentially be understood to apply to any actor that is not part of the national government. Despite being categorised under one banner, the term covers an extremely heterogenous mix of actors, ranging from actors operating at (inter)national levels (e.g., large businesses and NGOs that operate nationally and multi-nationally) to actors that operate at highly local levels (e.g., local governments, local CSOs, local businesses and business organisations, and private individuals). Accordingly, actors qualifying as SANS actors vary dramatically in terms of their capacities, roles and priorities (Sainz de Murieta and Setzer, 2019).

1.2 Why are SANS actors important in realising national adaptation policies?

National adaptation policy refers to the plans, strategies, laws and regulations that are put in place by the national government to achieve specific adaptation goals or address certain issues related to adaptation within the country.

While arguably being the key player in driving adaptation in their countries, national governments rarely – if ever – possess the necessary mandates and capacities to achieve the goals of their national adaptation policies without support from SANS actors (de Coninck et al., 2018). As a result, it is generally accepted that achieving the objectives of national adaptation policies will require a Multi-Level Governance (MLG) approach, in which the responsibilities for planning, financing and implementing adaptation are – to varying degrees – shared amongst the national government, subnational governments and non-state actors (Sainz de Murieta and Setzer, 2019). Consequently, while national adaptation policy is determined by national government actors, actually achieving the objectives of these policies is often – at least partially – reliant on action from a diverse coalition of SANS actors (Galarraga et al., 2011; Jensen et al., 2016; Duggan, 2019).

SANS actors can be involved in the implementation of national adaptation policies in a multitude of ways.

For example, while national adaptation policies establish the broad vision for adaptation within a target policy-area and put in place a framework of instruments that mandate and support its implementation – e.g., legislation, regulations and standards, incentives and penalties, and funding. Because the authority for acting on legal domains that are important for climate change adaptation – e.g., land use, urban development, disaster management – is commonly held at subnational levels of government (e.g., at the provincial or city-level); it is often subnational governments who are responsible for

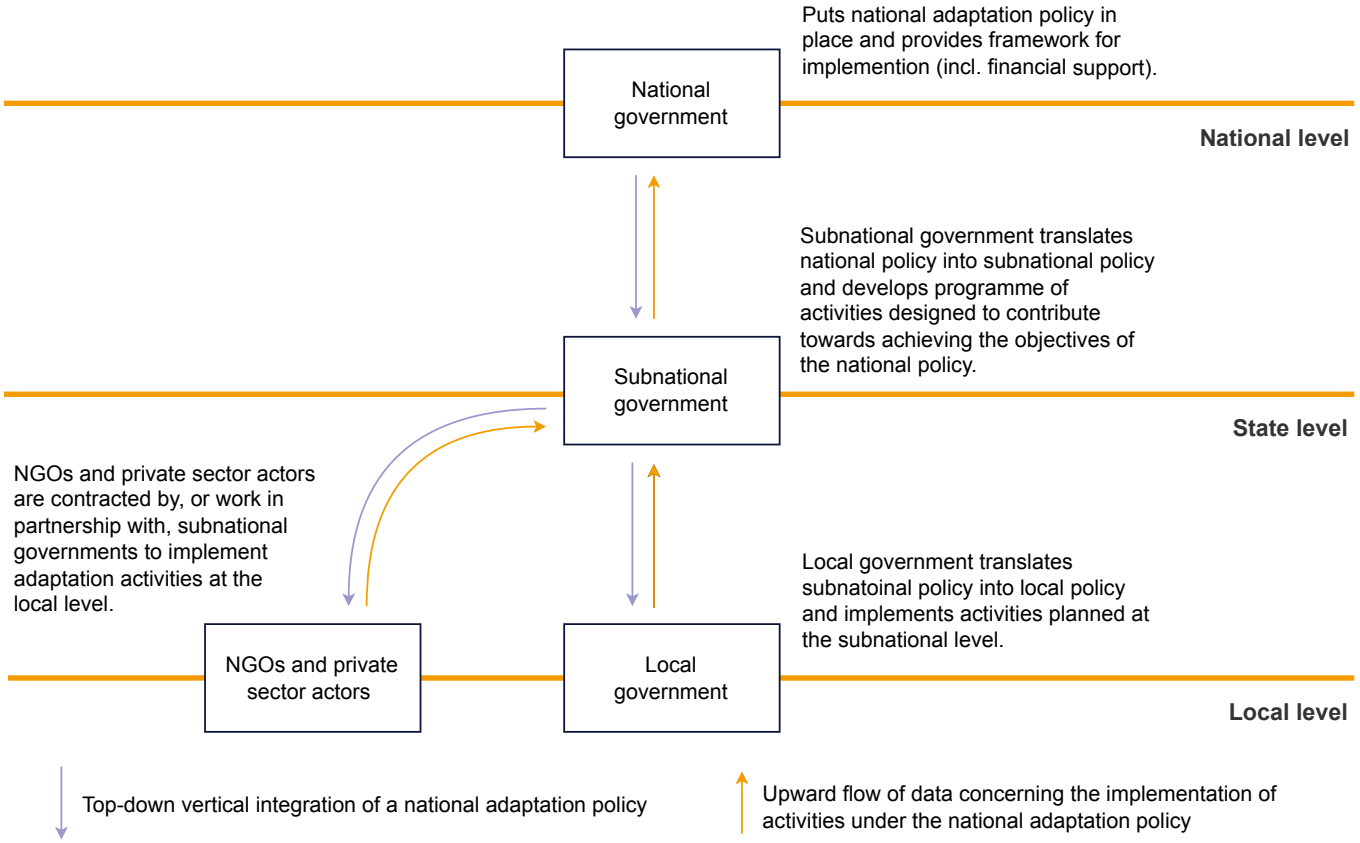
translating the policy's broad vision and implementing framework into more specific policies, plans and actions that are appropriate in the context of their jurisdictions (Galarraga et al., 2011; Sainz de Murieta and Setzer, 2019).

Similarly, the implementation of specific activities under national adaptation policies are often "outsourced" by national and subnational governments to non-state actors; either because the government actors do not possess the requisite capabilities to implement these activities, or it represents better value-for-money to outsource them to non-state actors. For example, businesses and universities are sometimes "contracted" by national or subnational government to deliver goods and services that support the implementation of the policy. NGOs and CSOs meanwhile, are often involved in implementing policies through partnerships with national and subnational government agencies, or by receiving government funding to carry out specific programmes or initiatives.

Figure 1 provides an illustrative example of how different types of SANS actors might contribute to the realisation of a national adaptation policy.

Furthermore, SANS actors can contribute to the realisation of national adaptation policy objectives, without being formally involved in the policy imple-

Figure 1 An example illustration of how SANS actors might contribute towards the realisation of a national adaptation policy



Source: Author
Note: Illustration provided in Figure 1 is provided as an example and as such, does not exhaustively illustrate all ways in which SANS actors contribute to the realisation of national adaptation policy.

mentation. In other words, SANS actors can implement adaptation-related actions that are not mandated or supported by a national adaptation policy, however, are nevertheless aligned with the objectives of these policies (i.e., are not implemented under the policy itself but are complimentary to its aims). Such actions can play an important role in supplementing the efforts of the national government and - if applicable – covering any gaps that exist in the policy framework established at the national level (Farber et al., 2014; Sainz de Murieta and Setzer, 2019). For example, many city, municipal and regional governments have developed their own adaptation policies, plans and strategies, which – while often aligned with national policy – are planned without being mandated by a policy at the national level and implemented using their own resources (Sainz de Murieta and Setzer, 2019). Likewise, government is seldom the only actor operating in the adaptation space (Westman et al., 2019). Non-state actors such as NGOs, CSOs and businesses also represent important actors in the adaptation arena, implementing adaptation-related activities in the public space (e.g., enhancing the resilience of communities or ecosystems – Westman et al., 2019); or – often in the case of businesses – climate-proofing their own operations (Schaer et al., 2019; Dale et al., 2022).

1.3 Why are SANS actors important in the monitoring and evaluation of national adaptation policies?

1.3.1 SANS actors as data providers

The monitoring and evaluation (M&E) of national adaptation policy is important because it allows policy-owners to assess whether a policy is on track to achieving its intended goals and whether it is having any unintended consequences. As such, it enables decision-makers to better manage policies, providing them with information that allows them to make strategic adjustments to the policy and its implementation framework with the aim of making it more effective and cost-efficient.

To be able to conduct these assessments however, those responsible for M&E need to have access to data relating to how the policy is being implemented – i.e., what activities are being implemented under the policy – and the outcomes these activities are achieving.

Given that they are commonly responsible for the "on-the-ground" implementation of national adaptation policies, SANS actors often represent 'gatekeepers' to information relating to how policies are being implemented and whether they are achieving their anticipated results. Consequently, when SANS actors play a key role in the implementation of national adaptation policies, M&E systems developed to assess these policies will need to integrate these actors into the system; providing them with the framework, infrastructure and enabling environment required to supply the M&E system with the required data. Failing to do this will mean that M&E systems developed will – in all likelihood – be unable to adequately assess the success of the policy in question.

1.3.2 SANS actors as technical specialists and data end-users

Although this guide focuses on their function as providers of data, SANS actors can play a number of other important roles in government-owned M&E systems. This includes as:

Technical specialists

In some M&E systems, coordinating agencies will choose to 'outsource' the responsibilities for executing the data analysis or evaluation elements of the system to external actors – usually, actors such as universities, research institutions or consultancies who possess specialist expertise in these processes. This is usually done because the coordinating agency either does not possess the relevant expertise to conduct the analysis or evaluation in-house, or they deem that – in order to avoid bias – it is beneficial for the analysis or evaluation to be conducted by external parties.

Data end-users

A data end-user of an M&E system is any actor that uses (or is meant to use) the final outputs of the M&E system. Typically, these outputs will be provided as knowledge products (e.g., reports, factsheets or info-

graphics) that provide the end-user with summarised information about the outcomes of the policy. The primary end-user of most M&E systems are the owners of the policy being monitored and evaluated, who would use the outputs to adjust the policy to enhance its effectiveness, learn lessons for future policy development and demonstrate accountability to the policy's key stakeholders.

However, while the policy-owner is often the primary target audience of the outputs of M&E systems, the information contained within reports, factsheets, infographics, etc. can also be useful to other stakeholders to the policy; including SANS stakeholders. For example, lessons uncovered through monitoring and evaluating the national policy could be highly relevant to subnational governments who have been involved in translating the national policy into subnational policies and activities. Likewise, NGOs and CSOs operating in sectors related to the policy are likely to be interested in the outputs of M&E systems as they can use this information to hold the government to account for its actions in this area.

2. Introduction to M&E and M&E systems

Section 2 provides readers with a cursory introduction to M&E and M&E systems. The section starts by describing the role that M&E plays in the policy implementation cycle (section 2.1). Following this, it describes what M&E systems are in practice and provides an overview of the different phases of their lifecycle (section 2.2).

2.1 The role of M&E in the policy implementation cycle

As alluded to in section 1.3.1, M&E can be used by national government actors to generate data that enable them to assess if a policy is achieving the results expected, to spot bottlenecks in implementation and to highlight whether the policy is having any unintended effects (positive or negative).

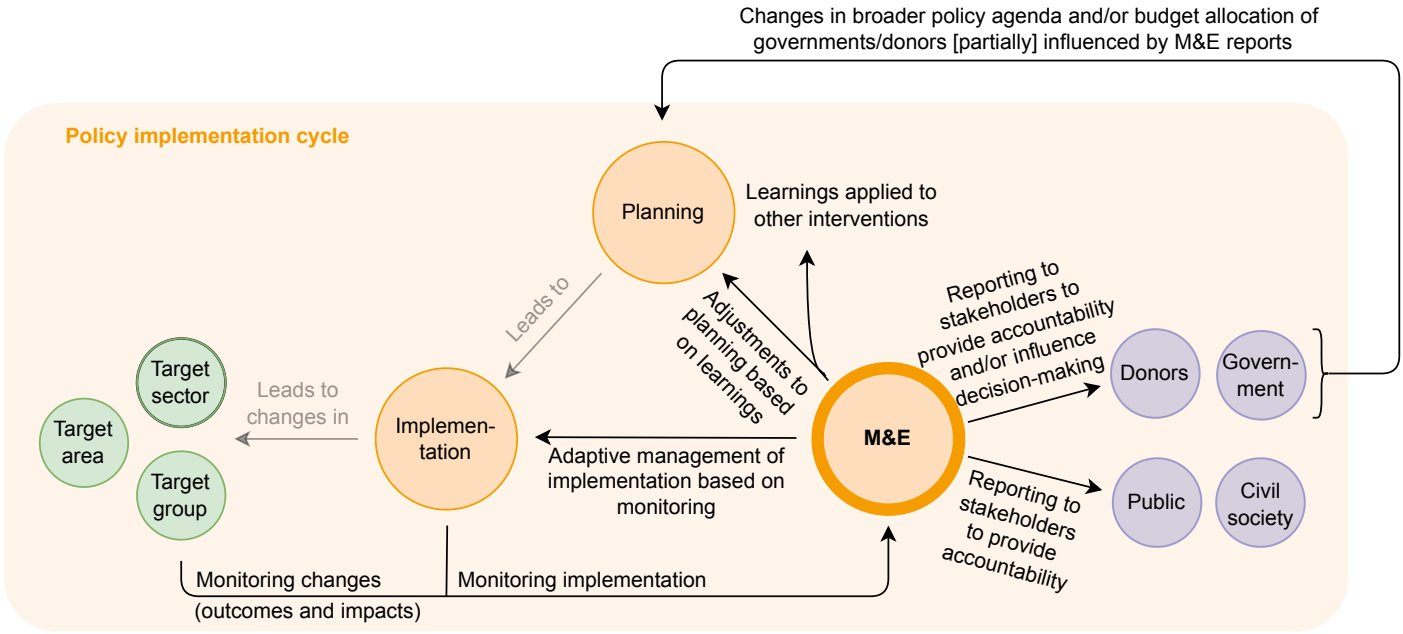
For policy-owners, data generated by M&E can serve a number of important management functions, including:

- to support the management of policy's implementation (i.e., facilitate evidence-based decision-making by policy-owners);
- to generate lessons about the policy and its implementation (e.g., what elements of the policy were [or were not] successful) that can be to present and future policy-making, and;
- to facilitate meaningful accountability with stakeholders.

M&E is often portrayed as representing the final part of the policy implementation cycle (visualised in Figure 2). However, while often used as a single term, 'monitoring' and 'evaluation' are actually two distinct processes:

- **Monitoring** is the systematic and continuous collection and analysis of information about the progress of an intervention. The process of monitoring an intervention would typically begin shortly after implementation has started, when policy-owners would start monitoring progress in implementation (i.e., monitoring inputs, activities, outputs and outcomes). It would then continue throughout the implementation of an intervention to ensure that that management decisions can be taken in a timely manner. It often feeds into evaluations and may also contribute to alterations in plans and budgets. Further, it can sometimes lead to the re-design of interventions (Hammill and Dekens 2014; Kelly-Price et al., 2015; Simister and Napier, 2017).
- **Evaluations** are normally carried out at a significant point during an intervention. This might be at the mid-point, at the end, or a period of time after the intervention has been finalised. Evaluations may also be carried out when an intervention moves into a new phase, or in response to a critical issue (e.g., an intervention not achieving its desired results). The purpose of an evaluation is to assess the performance of a project or programme against its objectives. To ensure that assessments are objective, they are often conducted by external parties (*ibid*).

Figure 2 Illustration of the various functions M&E can play in the policy implementation cycle



Source: Author

2.2 M&E systems

The term "M&E system" refers to the matrix of different elements (e.g., processes, mechanisms, data systems, institutional structures, agreements and policies) that facilitate the process of monitoring and evaluating a policy. While certain elements of M&E systems are tangible (e.g., software and equipment used in data collection, storage, transfer and analysis), a lot of what constitutes an M&E system is intangible and essentially only exists on paper (e.g., processes for data collection, transfer and analysis, and the agreements, institutional structures and policies that enable these processes to happen).

The different elements of an M&E system are usually contained within a centralised document, commonly known as an 'M&E plan'.These documents are shared among all actors participating in the system and act as a common terms of reference for how the M&E system is to be operationalised. This document should detail: (i) what the system aims to do; (ii) what processes, mechanisms, data systems, agreements and institutional structures are to be put in place to ensure that the system achieves its objectives; (iii) how these elements are intended to work; and (iv) how the responsibilities for implementing different aspects of the system are distributed among the different actors involved.

It is important note that M&E systems do not necessarily possess both a monitoring and an evaluation component. In fact, it is common for M&E systems to only possess a monitoring component, while in some cases, M&E systems do not possess a monitoring component (i.e., they evaluate policies without the continuous collection of data); although this is more rare (Hammill and Dekens, 2014).

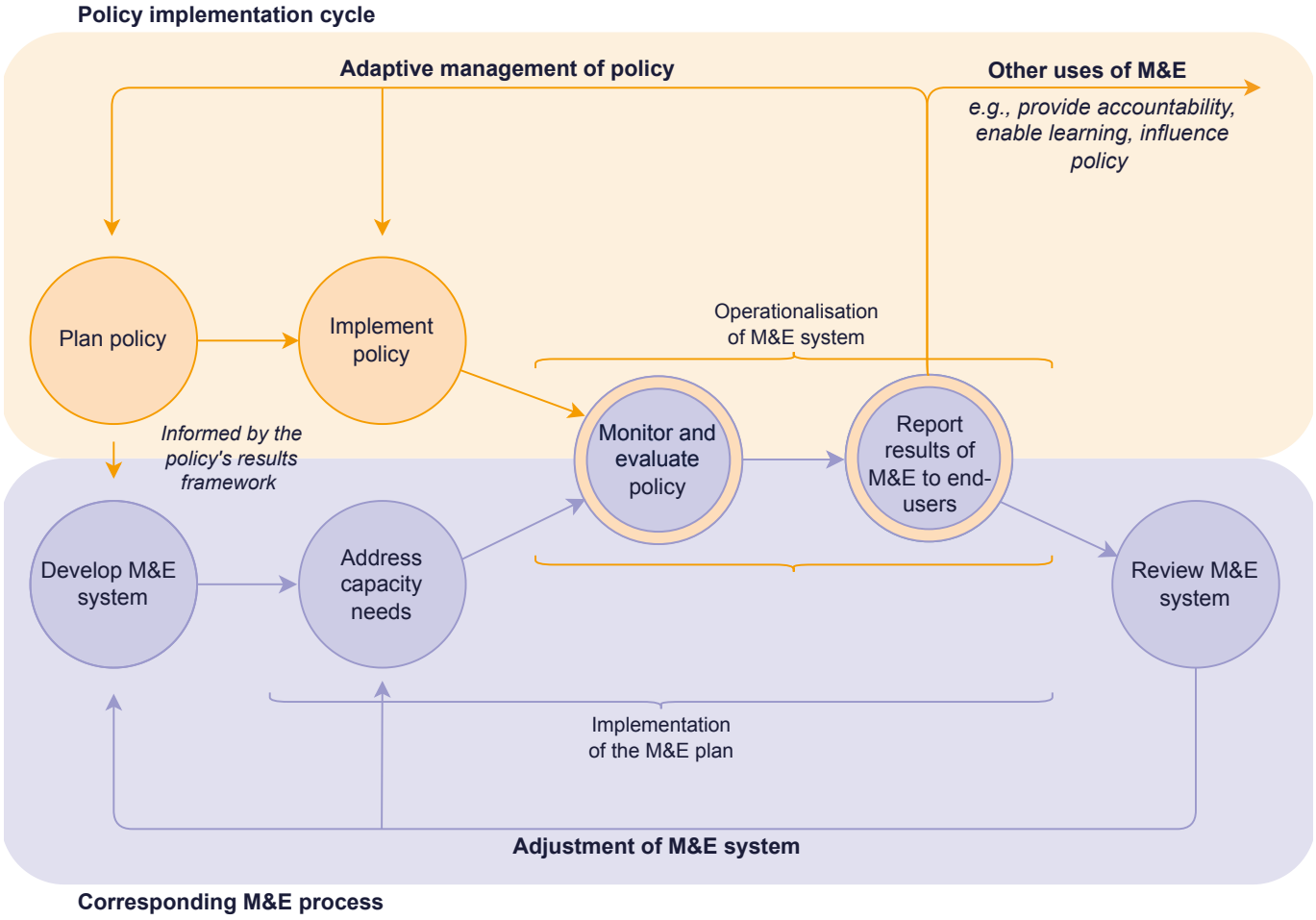
The M&E system implementation cycle

M&E systems are developed by policy-owners to facilitate the M&E phase of the policy implementation cycle. While they can feasibly be developed retroactively after the implementation of the policy has begun, it is good practice to start the process of developing an M&E system alongside the planning of the policy. More specifically, it is good practice to develop the M&E system in parallel with the policy's results framework. This will ensure that (i) the goals and targets specified in the policy's results framework are possible to monitor, and (ii) the design of the M&E system is at all times aligned with the M&E needs of the policy (Consultative Group of Experts [CGE], 2020).

Similar to the policy implementation cycle illustrated in Figure 2, the implementation cycle of an M&E system can be divided into the three broad phases: development, implementation, and review.

The implementation cycle of an M&E system – and how it corresponds with the policy implementation cycle – is presented in Figure 3. These phases are described in the remainder of this section.

Figure 3 Visualisation of the policy implementation cycle, the M&E system implementation cycle and how they interlink

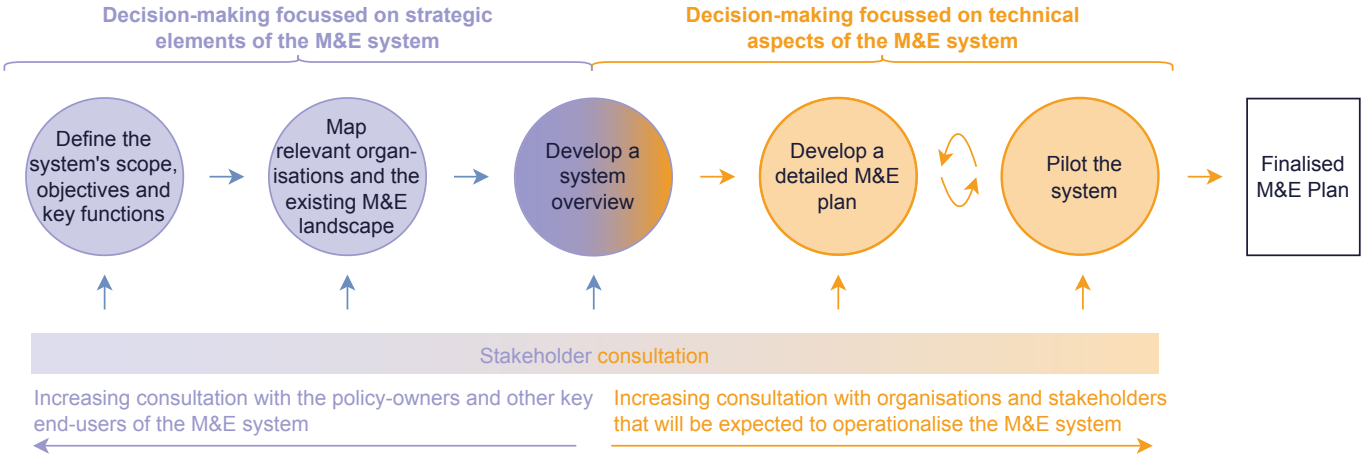


Note: In this figure the "implementation phase" of an M&E system is visualised as three sub-phases: Address capacity needs, monitor and evaluate policy and report results of M&E to end-users.
Source: Author

1. Development of the M&E system

The "development phase" starts as soon as the decision is made to develop a system to monitor and evaluate a policy and ends with the delivery of a finalised M&E plan.

Figure 4 Key steps in developing an M&E system



Source: Author

As visualised in Figure 4, the development phase can itself be split into a series of five broad steps that will need to be undertaken before a finalised M&E plan can be delivered. These steps are:

- **Defining the system's scope, objectives and key functions** – in which the scope, objectives and key functions of the system will be decided, typically by the system's key stakeholders (e.g., the policy-owners and other key stakeholders).
- **Mapping relevant organisations and the existing M&E landscape** – in which actors that could participate in the M&E system (e.g., as data providers) and pre-existing M&E systems that could potentially provide data to the system are mapped.
- **Develop a system overview** – in which a broad conceptualisation of the M&E system is developed. Without specifying specifics (e.g., such as what individual indicators are to be collected and how they are to be defined), a system overview would visualise where the required data would be collected (i.e., by whom) and how this data would flow between different organisations involved in processing, analysing, synthesizing and using this data.
- **Develop a detailed M&E plan** – in which the individual components of an M&E system would be developed and consolidated into a single system. Once the full system is developed, it should be documented in an M&E plan.
- **Pilot the M&E system** – in which the M&E system documented in the M&E plan is operationalised to a limited extent to test whether the system functions as it should and to highlight any aspects of the system that are not working.

As illustrated in Figure 4, stakeholder consultation represents an inherent part of each step in developing an M&E system. However, despite being a constant feature of the development process, the purpose of stakeholder consultation and the type of

stakeholders consulted will change over the development process to reflect the information needed at each step. For example, in the earlier stages of the development process, focus will be placed on establishing strategic elements of the M&E system – e.g., determining what the objectives of the M&E system are. In this phase, the opinions and perspectives of the system's key end-users (e.g., policy-owners and other important stakeholders) will be critical for developing a system that addresses genuine demands. Once the broad strategic elements are in place however, focus will shift towards developing technical aspects of the M&E system – e.g., the processes, mechanisms, data systems, institutional structures, agreements and policies that facilitate the collection, processing, reporting, and analysis of data. At which point, stakeholder consultation should increasingly engage the actors expected to operationalise the M&E system to ensure that the system is technically and logistically feasible.

It is worth noting that these steps are not linear and may be carried out in a different order depending on the circumstances surrounding the development of the M&E system. Furthermore, there may be a large degree of iteration between the steps, as the outcomes of certain steps might require earlier stages of the process to be re-opened (e.g., insurmountably challenges uncovered when developing the detailed M&E plan might result in the system overview being reassessed).

2. Implementation of the M&E system

In the implementation phase, the different actors involved in the system's operationalisation will carry out the tasks that they have been allocated within the M&E plan. Most prominently, these tasks would be those that directly contribute to the process of monitoring and evaluation – i.e., data collection, data processing, reporting, the analysis and synthesis of data, and the communication of the system's outputs to the its intended end-users.

This phase however, also includes the implementation of capacity building activities aimed at ensuring that the actors involved in operationalising the M&E system (including the system's lead agency and end-users) have the capacity to undertake the tasks they are responsible for carrying out. Logically, such activities would be implemented before the M&E system is operationalised (see Figure 3).

3. Review of the M&E system

The review phase would typically begin following the finalisation of the implementation phase; something that would usually be marked by the delivery of the M&E system's main output (e.g., a final report). In this phase, the performance of the M&E system is reviewed to evaluate the system's performance and highlight any aspects of the system that are not working (and therefore need correcting).

Reviews should not only focus on the technical aspects of the system – i.e., the quality and quantity of information being generated. They should also consider the extent to which the outputs of M&E systems are being used by their intended end-users. Where reviews identify that utilisation of M&E outputs is low, it is necessary to identify reasons and address them. Potential reasons for low utilisation of M&E outputs include: low awareness of its existence, poor quality data that are considered to be unreliable, low level of demand for M&E outputs, or a lack of staff able to analyse and act on the information (Mackay, 2007).

3 Integrating SANS actors into M&E systems

Section 3 provides an overview of elements and conditions that need to be in place for SANS actors to participate in an M&E system. The section starts by describing the key elements that need to be in place for SANS actors to be integrated into M&E systems (section 3.1). Following this, it provides a conceptual overview of the enabling conditions that need to be in place for SANS actors to participate in an M&E system (section 3.2). Finally, it describes the key challenges that often prevent these conditions from being created for SANS actors (section 3.3).

3.1 Integrating SANS actors into an M&E system

As outlined in section 1, to be able to conduct robust assessments of policy implementation and results, those coordinating/leading the M&E process (hereon referred to as 'lead agencies' – see Box 3) will often be reliant on SANS actors to provide data concerning the implementation and results of activities implemented under the policy. As such, M&E systems developed to monitor and evaluate a policy will need to integrate these actors into the design of the system.

BOX 3

What are lead agencies?

The lead agency in an M&E system is the organisation (or unit) responsible for the development and subsequent operationalisation of the M&E system. As such, lead agencies would lead the task of developing the M&E system and be responsible for making decisions concerning the technical aspects of the system (e.g., what indicators are to be collected and by whom). Once M&E systems are developed, a lead agency's focus would be coordinating and managing the operationalisation of the system and periodically reviewing its performance.

In government-owned M&E systems, the lead agency is typically a unit within the organisation that "owns" the policy being monitored and evaluated. However, in some cases the development or operationalisation of the M&E system might be outsourced by the policy owner to another organisation with relevant technical expertise (e.g., a university or consultancy). This would typically occur when the policy owner deems that it lacks the necessary expertise and in-house resources to either develop or operationalise the system itself.

Integrating SANS actors into an M&E system refers to the act of providing actors with a formal role in the M&E process and putting in place the necessary elements that enable them to carry-out this role.

Allocating actors with a formal role in the M&E process is achieved by assigning them with the responsibility to perform specific tasks (e.g., collecting certain datasets) within the M&E system; something which should occur in the M&E system's central planning document (i.e., the M&E plan).

To fulfil their roles meanwhile, SANS actors need to be provided with the following elements:

Indicators and indicator protocols

Indicators are a measurable or observable variable that provides information about a particular phenomenon, issue, or trend. They are periodically measured (i.e., monitored) by M&E systems and function as clues, signs or markers that can be analysed to show whether a policy or specific activity is achieving its desired outcome.

Indicator protocols are the collection of procedures that have to be followed to measure individual indicators. Amongst other things, they should describe: what metrics contribute to the indicator,[1] how these metrics are to be collected and processed (including where metrics are to be collected from and what tools and methodologies are to be applied in their collection); how often data collection should take place; and who is responsible for executing these processes. Indicators and indicator protocols will be documented in an M&E system's indicator framework (typically a component of the M&E system's M&E plan).

Tools and methodologies

Very often, processes for collecting, processing and reporting data will require those executing them to apply specific tools or methodologies. They are developed as a means of ensuring that data collection-reporting processes are conducted correctly (i.e., as envisioned by the coordinating agency) and consistently across the whole M&E system. Tools and methodologies generally work by guiding actors through the process of collecting, processing or reporting data. In some cases, they also semi-automate certain aspects of the process (e.g., excel-based tools might conduct calculations or visualise data).

Reporting protocols

Reporting protocols refers to the collection of procedures that lead to data being transferred between data providers and the lead agency. Amongst other things, they should describe: in what format data should be reported, how often data should be reported to the lead agency, and who is responsible for executing these processes.

Reporting infrastructure

Reporting infrastructure refers to the hardware through which data is transferred between data providers and the lead agency. In many cases, reporting infrastructure is relatively low-tech, relying on simple spreadsheet-based reporting templates and email to input and transfer data. In other cases, reporting infrastructure can be comprised of bespoke reporting platforms through which data providers would upload data via an online portal.

Institutional arrangements

The term institutional arrangements refers to inter-institutional agreements made between data providers and the lead agency regarding the collection and reporting of data. Inter-institutional agreements can be expressed in various formats that possess a wide range of qualities. For example, they can vary from being written contracts that are legally binding and include mechanisms for recourse in case of the failure of one party to deliver, to verbal agreements that are not legally binding. The appropriateness of different types of inter-institutional agreement will vary depending on the circumstances in which they are being applied. However, the presence of *some form* of inter-institutional agreement with a potential data provider is a pre-requisite for securing their participation in the M&E system.

Supporting arrangements

Supporting arrangements are arrangements that support data providers to perform their core tasks, but do not in of themselves directly contribute to the execution of these tasks. In the context of enabling actors to participate as data providers to the M&E system, these arrangements would be processes, mechanisms, agreements and programmes that are put in place to increase the financial and human capacities of these actors so they are able to collect, process and report the data required by the system.

[1] Metrics are the individual data points that are combined to form indicators. In some cases, an indicator will be composed of a single metric (e.g., km² of coastal mangrove restored). However, indicators are often composed of multiple metrics (e.g., agricultural productivity data combined together with information about climate variability and extreme events – Leiter et al., 2019).

3.2 Conditions for integrating external actors into M&E systems

While the presence of the elements described above are a pre-requisite to integrating external actors into an M&E system, their presence alone does not guarantee that external actors will actually partake in the M&E system.

Lead agencies need to be aware that actors expected to participate in an M&E system have agency, meaning that they have freedom of choice over the activities that they engage in. This means that simply putting in place elements that enable them to participate is not always sufficient. Instead, the elements put in place need to create conditions in which external actors are willing to participate in the M&E system.

External actors will be willing to participate in an M&E system when they deem that the reasons motivating them to do so outweigh the burden that participating in the M&E system poses. As such, whether an external actor will be willing to participate will be determined by:

- the net-strength of the motivation for participating
- the overall size of the burden posed by the M&E system

The following subsection will describe the factors that contribute to motivating external actors to participate in an M&E system, and those that contribute to determining the extent to which participating in an M&E system constitutes a burden for external actors.

3.2.1 Motivation for participating in an M&E system

Motivations for participating in an M&E system can be divided into two broad categories: 'pull factors' and 'push factors' (Mackay, 2007). The overall motivation an actor has to participate in an M&E system will be a net-product of the various push and pull factors it is exposed to.

Pull factors

Pull factors are those that positively incentivise participation – i.e., they make an actor actively want to participate in the M&E system. Generally, a desire to participate in an M&E system will be driven by two perceptions. First, the perception that there are tangible benefits to be gained through participating in the M&E system (Box 4 presents different benefits that could motivate SANS actors to participate in government-owned M&E systems). And second, the perception that the M&E system is generally worthwhile – e.g., they believe the M&E system will meaningfully help the national government tackle the vulnerability of a specific sector to climate impacts. Therefore, actors may be motivated by the fact they believe participating in the M&E system represents a worthy endeavour.

BOX 4

Potential benefits of participating in a government-owned M&E system

Participating in government-owned M&E systems can be beneficial for SANS actors in two main ways.

First and foremost, providing data to their M&E systems allows SANS actors to draw the government's attention to the activities that they are implementing. Having the government be aware of their activities can be important for SANS actors as the national government are often an important stakeholder to their organisation. Additionally, they can also represent an important partner and source of finance for their activities. As such, being able to demonstrate that they are active in a certain policy area and achieving successful results can be important for bolstering their reputation with the government; something that can lead to future collaboration with the national government and unlock further financial support.

Secondly, the data collected for government-owned M&E systems can be utilised by SANS actors for other purposes. These include:

- To communicate with other stakeholders to inform them of the activities they are implementing and the positive impact that these activities are having (e.g., an NGO might use this data in communications to donors and other key stakeholders). This can be useful for SANS actors as being able to clearly and concisely articulate their achievements to important stakeholders can be key in securing future partnerships and financial support.
- To support their own decision-making. Whether this is doable depends on the extent to which data being collected by government-owned M&E system is useful for making decisions about specific "on-the-ground" activities. If it is, SANS actors can use this data as the basis for making informed decisions.

Push factors

Push factors are those that make an actor feel like they need to participate in the M&E system to avoid negative repercussions (i.e., they negatively incentivise participation).

Factors that push a SANS actor towards participating in an M&E system are created when a stakeholder creates a mandate for them to participate in the M&E system. In government-owned M&E systems, this mandate would typically be created by the national government.

Mandates embody the expectations of stakeholders. They can be expressed formally and informally. Formal mandates are instructions or directives given by a recognised authority or governing body, they are typically embedded in written documents that have (varying degrees of) legal weight (e.g., legislation, policies, written agreements). Informal mandates are requests or directives that are not formally or officially stated, but are created through informal communication (e.g., verbal agreements) or a common understanding between an organisation and its stakeholders.

Adhering to mandates – formal or informal – is important for actors as failing to meet them can result in negative repercussions. Failure to meet a formal mandate created – e.g., by a piece of legislation or a data-sharing agreement – can lead to legal action, fines and a loss of funding. Similarly, failure to live-up to both formal and informal mandates can lead to a loss of confidence/legitimacy from key stakeholders.

The strength of a push factor generated by a mandate is often determined by multiple factors. The strength of formal mandates for example, can be determined by the legal weight or bindingness of the document it is embedded within, the clarity and specificity of the language used, and the stipulated consequences of noncompliance. Meanwhile, the strength of informal mandates can be determined by the relationship between the parties involved, the context in which the mandate is created, and the perceived consequences of noncompliance.

3.2.2 The burden posed by an M&E system

The burden an M&E system poses on an external actor refers to the extent to which the actor in question will find participating in the M&E system difficult to do.

Participating in an M&E system requires actors to expend resources, whether this be staff time, expertise, equipment or finance. To be able to participate, actors will be required to find these resources and make them available. As the resources of all actors are ultimately limited – albeit, to greater and lesser extents – finding and making available the necessary resources will represent a challenge to some degree. The scale of that challenge represents the burden posed by the M&E system and will be determined by:

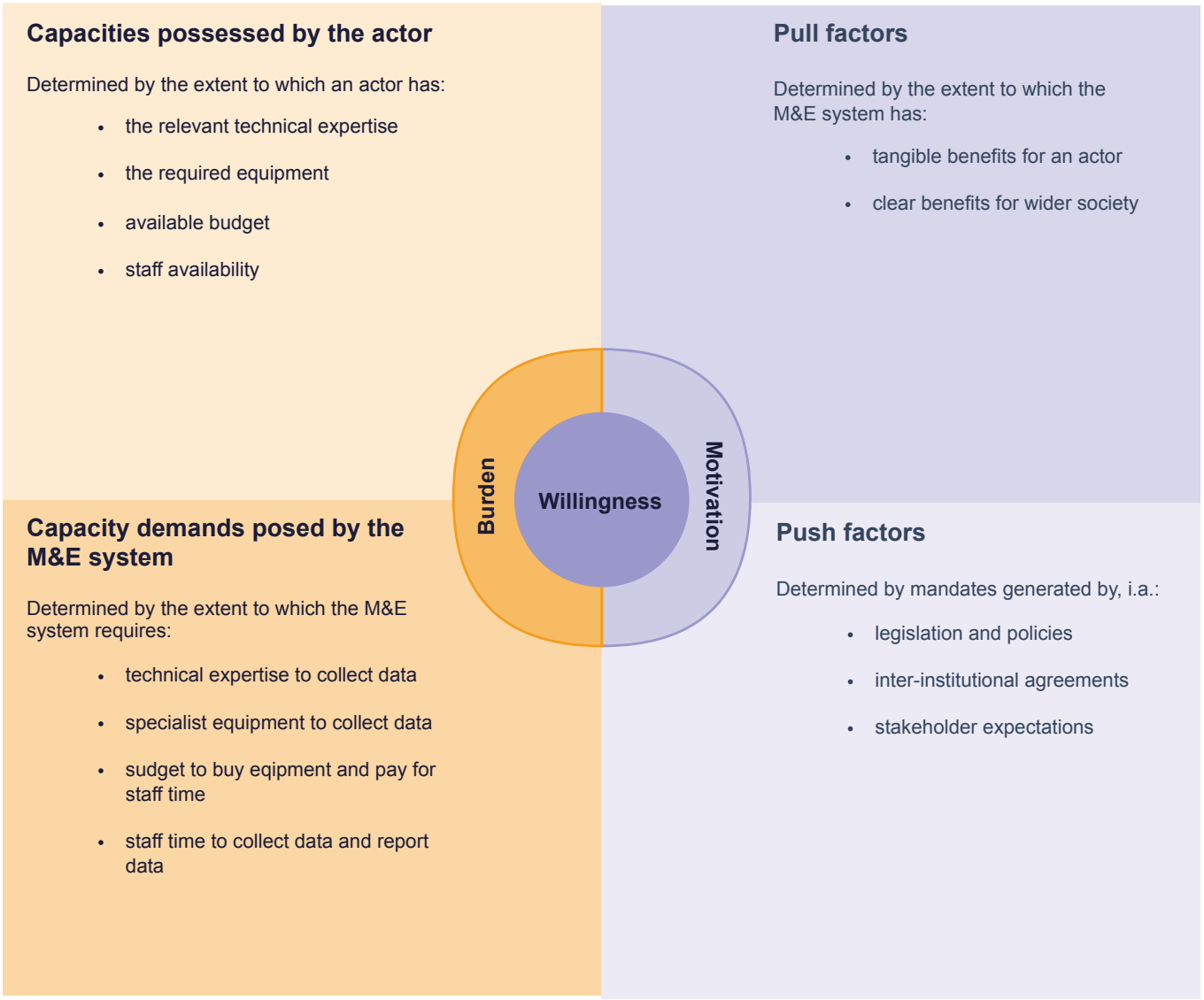
- the capacity demands of the M&E system (i.e., the resources needed to participate in the system), and
- the capacity possessed by the external actor (i.e., the amount of required resources it can make available).

As the burden posed by an M&E system is dependent on the characteristics of both the M&E system and the participating actor, the size of that burden is a relative concept. This means that executing the same tasks under an M&E system will pose different burdens to different actors, with the burden being lighter for actors with higher capacities and heavier for actors with lower capacities.

3.2.3 Willingness to participate in an M&E system

As aforementioned, an external actor will be willing to participate in an M&E system when they see the burden posed as being justified by the motivations for doing so. Where the threshold between an external actor being willing or unwilling to participate in an M&E system lies will depend on the relative strengths of the individual push and pull factors. The interactions between these individual factors are illustrated in Figure 5.

Figure 5 Factors that determine whether an external actor is willing to participate in an M&E system



Source: Author

While there will inevitably be a theoretical threshold between being willing and unwilling to participate in an M&E system, willingness to participate is not a binary state. Instead, it can be viewed as lying on a continuous spectrum between:

- **very unwilling** – where participating in the M&E system is absolutely not a priority as actors view the system as a pointless exercise and an unnecessary use of their resources.
- **very willing** – where participating in the M&E system is a high priority as actors view the exercise as very meaningful and are thus, enthusiastic about collecting high quality data and sharing it with the lead agency.

The extent to which an actor is willing to participate in the M&E system will inevitably have consequences on the quality and completeness of the data they deliver. As a general rule, the more willing an actor is to participate in the M&E system, the more likely they are to allocate the time and resources required to provide the system with high quality data. Conversely, the less willing an actor is to prioritise participating in an M&E system, the more likely they are to "cut corners" in data collection – i.e., not follow indicator protocols to the letter – and deliver data that is messy, incomplete and not of the required quality.

3.3 What prevents SANS actors from participating in M&E systems?

While the elements required to integrate SANS actors into an M&E system are – fundamentally – the same as other types of actor, creating the conditions required for SANS actors to be willing to participate in an M&E system can be more challenging.

General challenges associated with securing the participation of external actors

Putting these conditions in place can be difficult in any circumstance – even when the actors being integrated into the M&E system are clearly capable of taking on the burden that participating in an M&E system represents and *should* have clear motivations for doing so.

One reason for this is that key figures within an organisation – e.g., management – are resistant to the idea of conducting M&E.

Resistance to M&E can be founded in a number of reasons. One is that M&E is often seen by actors as an "additional burden" rather than a fundamental element of the policy implementation cycle. This perception is impart driven by the fact that conducting M&E properly is time consuming and requires a significant share of the overall budget (Görgens and Kusek [2009] recommends that M&E should constitute 7–10% of an activity's total budget). This is often perceived as being too costly and not representing good value for money; particularly by actors that are sceptical or unaware of the benefits that can be realised through M&E (Mackay, 2007; Görgens and Kusek, 2009).

Another reason might be that key figures within an organisation might be concerned that the results of M&E will be used to (unfairly) hold them accountable if the performance of the activities they are implementing are below expectations (Mackay, 2007). This sentiment is particularly likely to exist when managers feel that they have not been provided with the resources to achieve the expected objectives (*ibid*).

Specific challenges associated with securing the participation of SANS actors

The general challenges outlined above however, are likely to be more prevalent with SANS actors. This is because SANS actors are:

- Less likely to possess the capacities required to collect appropriate data than actors from the national government
- Less likely to view participating in the M&E of national policy as part of their mandate and are thus, less likely to view it as a priority.

For M&E systems that are heavily reliant on receiving data from SANS actors, these realities can pose a major challenge.

Overcoming this challenge requires lead agencies to balance the need to develop M&E systems that are capable of generating the robust data required for M&E, with the capacities and motivations of the actors expected to collect data on behalf of the system. Thus, while the ability to generate robust data is generally considered a key success criterion for any M&E system, it is equally important to develop an M&E system that is appropriate to the capacities and motivations of the actors expected to operationalise it.

Failure to adequately consider the capacities and motivations of the actors participating in the M&E system can lead to a situation where these actors are either unable or unmotivated to collect data on behalf of the system, in the manner stipulated in the M&E plan. In such situations, actors are likely to respond by either not collecting data or by "cutting corners" to make data collection quicker, simpler and less costly. Both scenarios are likely to have negative implications on the quality of data collected by the system and consequently, diminish the system's ability to produce robust and reliable data that is useful for supporting decision-making processes. In the longer term, this may threaten the sustainability of the M&E system as policy-owners will fail to see the system as useful and therefore be disinclined to continue financing it.

Photo: UNEP

Part II

Enhancing the conditions for subnational and non-state actor participation in M&E systems

Building on the conceptual framework illustrated by Figure 5 (section 3), part II of this document provides readers with guidance on how the conditions for SANS actor participation in M&E systems can be enhanced during the broader process of developing an M&E system.

Section 4 provides readers with an overview of how shortfalls in capacity and motivation for participating in an M&E system amongst SANS actors can be identified during the broader process of developing the system.

Following this, section 5 provides an array of different measures lead agencies can implement during the process of developing an M&E system that enhance the conditions for the participation of SANS actors. Using the conceptual framework presented in Figure 5, these measures are organised into those that can reduce the burden of participating in M&E systems (presented in section 5.1) and those that can increase the motivation of actors to participate (presented in section 5.2).

4. Identifying barriers to SANS actor participation in M&E systems

Adequately considering whether SANS actors have sufficient levels of capacity and motivation to participate in an M&E system will require lead agencies to engage these actors in a two-way dialogue that explores their capacity and motivation to collect and report data on behalf of the M&E system. This dialogue should be facilitated through a continuous 'stakeholder consultation process' that starts early on in the process of developing an M&E system.

4.1 The role of stakeholder consultation in identifying barriers to participation

Consulting SANS actors will enable them to influence the design of parts of the M&E system that are relevant to them by giving them an opportunity to inform and – in some cases – take an active role in the development process.

By consulting SANS actors, lead agencies will provide those expected to collect data for the M&E system with a platform through which they can give feedback on the proposed indicators (e.g., concerning whether collecting these indicators is feasible), highlight capacity gaps or support needs they may have, and provide suggestions as to how the M&E system could be adjusted to better motivate them to participate in the system.

In addition to facilitating feedback, stakeholder consultation can also benefit the M&E system's development process by providing lead agencies with access to relevant information and knowledge that they otherwise would not have access to. This can include information about data that SANS actors already possess (including the limitations of this data). Furthermore, involvement in the M&E system's development can play an important role in building trust between lead agencies and SANS actors, and can help to instil a sense of ownership amongst SANS actors towards the M&E system (Mackay, 2007).

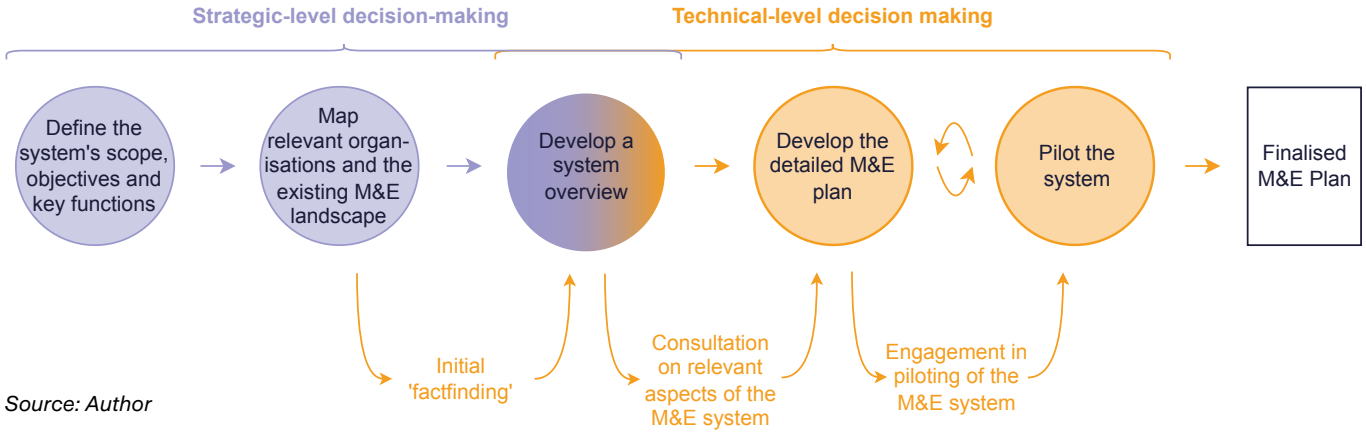
The role of stakeholder consultation in the broader process of developing an M&E system

As highlighted in section 2.2., stakeholder consultation represents an inherent part of each step in developing an M&E system. However, despite being a constant feature of the development process, the purpose of stakeholder consultation and the type of stakeholders consulted will change over the course of the development process to reflect the information needed by the lead agency at each step.

During the initial stages of developing an M&E system, consultation with potential SANS actors is likely to be centred around 'factfinding' that explores which actors are best placed to collect desired data and to what extent they are already doing so. Later, once a broad overview of the system is in place, engagement with SANS actors should become more intense, focussing on consulting SANS actors on the design of the M&E system and co-developing solutions to any potential issues that they highlight (e.g., relating to proposed indicators). This focus for stakeholder consultation would continue through the piloting of the M&E system, as SANS actors are involved in testing the system that has been developed. Once the M&E system is operationalised, the intensity of interactions with SANS actors is likely to drop significantly and become more ad hoc, with the focus being overcoming operational issues as and when they arise.

Figure 6 illustrates how the purpose of consulting SANS actors will change at different stages of the process of developing an M&E system.

Figure 6 Different purposes for stakeholder consultation with at SANS actors distinct stages of developing an M&E system



Source: Author

Given that the purpose of stakeholder consultation is to inform the M&E system's development process, consulting SANS actors about the design of the M&E system will begin in earnest once the strategic elements of the system have been decided upon (i.e., once a broad system overview is in place – see Figure 6).

Approaches to stakeholder consultation

Approaches to stakeholder consultation can vary greatly. When planning stakeholder consultation activities, lead agencies will need to make decisions concerning the extent to which SANS actors are consulted, and whether they will be granted some form of decision-making power over the final outcome. Figure 7 illustrates how stakeholders can be afforded varying levels of influence in stakeholder consultation processes.

Figure 7 The stakeholder engagement spectrum

Increasing levels of stakeholder engagement →				
Low-level of influence		**Medium-level of influence**	**High-level of influence**	
Inform	**Consult**	**Involve**	**Co-develop**	**Empower**
Provide SANS actors with information about the aspects of the M&E system they are expected to operationalise. Decision-making remains with the lead agency.	Obtain feedback from SANS actors concerning the aspects of the M&E system they are expected to operationalise. Decision-making remains with the lead agency.	Work directly with SANS actors throughout the process of developing the aspects of the M&E system they are expected to operationalise to ensure that their concerns and aspirations are consistently understood and considered. Decision-making remains with the lead agency.	Partner with SANS actors in developing aspects of the M&E system that they are expected to operationalise. SANS actors are granted some level of decision-making power.	SANS actors are granted complete decision-making power over aspects of the M&E system that they are expected to operationalise.

Likely to be the most appropriate approaches when consulting SANS actors concerning the development of an M&E system

Source: Adapted from Initiative for Climate Action Transparency (ICAT) (2020)

There is no one correct approach to how lead agencies should approach stakeholder consultation when developing an M&E system, with each approach having benefits and trade-offs from the perspective of those leading the development process. For example, increasing the extent to which SANS actors are consulted will increase the likelihood that the benefits of stakeholder consultation are realised, thus increasing the amount of information available to lead agencies facilitating more robust decision-making. However, achieving this requires significant time and resources, which lead agencies will need to make available from the overall budget. Likewise, increasing the level of influence SANS actors are granted can better enable them to develop indicators and processes that are more appropriate in the context of their capacities and priorities. However, granting them too much influence will increase the risk that the indicators and processes developed will be less appropriate in the context of the M&E system's primary objectives (as decided through consultations with the system-owners and key stakeholders). Thus, an overly democratic approach to stakeholder consultation can become counterproductive (Simister, 2019).

Bearing this in mind, adopting an approach that falls between consulting and co-developing on the stakeholder participation spectrum (highlighted in red in Figure 7) may be optimal for lead agencies if they wish to strike a balance between realising the benefits of stakeholder consultation and retaining sufficient control over the development process.

BOX 5

The Initiative for Climate Action Transparency (ICAT) stakeholder participation guide

ICAT's stakeholder participation guide provides readers with comprehensive step-by-step guidance for planning and implementing stakeholder consultation processes. The guide is not specifically targeted at engaging stakeholders in the context of developing M&E systems but is applicable to this context.

4.2 Capacity needs assessments

While there is no one correct approach to conducting stakeholder consultation, prior to beginning the process of developing aspects of the M&E system relevant to SANS actors, it is good practice to undertake a Capacity Needs Assessment (CNA) with these actors.

A CNA is a structured assessment of the capacity of an organisation. They are conducted to identify capacity gaps that need to be addressed before an organisation is able to meaningfully engage in an activity or policy area. In this context, a CNA would be used to assess the capacity of SANS actors to collect data on behalf of the M&E system.

Undertaking CNAs with SANS actors will provide lead agencies with a comprehensive understanding of the capacity that these actors have at their disposal and what capacity gaps exist that prevent them from collecting the data required by the M&E system. Additionally, CNAs also provide lead agencies with a platform to explore and assess the predisposition of actors to participate in the M&E system (i.e., their motivation and willingness to devote time and resources to participating in the system).

The outcomes of a CNA with SANS actors should inform the development of aspects of the M&E system that these actors are involved in operationalising (e.g., the M&E framework). Doing so should ensure that these aspects of the M&E system are appropriate given the capacities of these actors and their willingness to participate in the system. Furthermore, the capacity gaps identified in the CNA should serve as the basis for the development of capacity building resources and events intended to overcome these capacity gaps.

Box 6 presents the CAT4CAT tool that can be used to support CNAs for M&E.

BOX 6

Tools for conducting capacity needs assessments for M&E

The Capacity Assessment Tool for Climate Action Transparency (CAT4CAT) has been developed by the ICAT to support those developing M&E systems for climate policies conduct CNAs for M&E. It works by identifying key characteristics and capacities that actors should possess if they are to successfully engage in M&E activities and providing users with intuitive questions that can act as an entry point to exploring to what extent the actors being engaged possess these characteristics and capacities.

Those looking to use the CAT4CAT tool should note that the tool should be applied flexibly, meaning users will need to look at these characteristics, elements and questions proposed by the tool and decide which are relevant to their context and if any require adjusting to become more relevant.

5. Measures for strengthening conditions for SANS actors to participate in M&E systems

Building on section 4, which presents the role of stakeholder consultation in identifying barriers to integrating SANS actors into M&E systems. Section 5 presents a 'menu' of potential measures that can be implemented before or during the process of developing M&E systems to (better) ensure that SANS actors are able and motivated to participate in the M&E system.

Using the conceptual framework presented in section 3 as its point of departure, this section is divided into two sub-sections:

- Section 5.1 presents measures that can be implemented to (better) ensure SANS actors are able to participate in an M&E system
- Section 5.2 presents measures that can be implemented to enhance the motivation of SANS actors to participate in an M&E system

How to use section 5

Readers can approach section 5 in two ways:

1. **They can read the section from start to finish.** Taking this approach will ensure that readers come away with a full overview of the different measures at their disposal.

2. **They can navigate the section through Table 2**. Table 2 presents a summary of the different measures lead agencies can implement to strengthen the conditions for SANS actor participation in an M&E system. Each measure contains a hyperlink that can direct the reader to that measure's description. Therefore, readers who want to "jump" to a specific measure can use these hyperlinks and avoid scrolling through section 5 from start to finish.

It is important to note that the applicability and effectiveness of each measure presented in this section will be context specific. As such, not all measures will be effective or even applicable in all circumstances.

Furthermore, in many cases, applying these measures will require lead agencies to use additional resources; thereby placing extra stress on the budget they have for developing – and later on operationalising – the M&E system. Budgets allocated to developing and operationalising M&E systems often offer limited financial wiggle room. Consequently, when reviewing the measures presented in section 5, lead agencies should consider whether they are feasible to implement in their M&E systems given the financial resources they have available to them.

Advantages and trade-offs associated with these measures, and their suitability for use in different circumstances, are discussed for each measure.

Table 1 Overview of measures presented in section 5

Primary objective	Measures
Reducing the burden	**Ensuring that SANS actors have sufficient capacity to participate** *Measures for increasing human capacity within SANS actors:* ▪ Measure 1: Provide SANS actors with guidance and training ▪ Measure 2: Provide SANS actors with access to continuous technical support ▪ Measure 3: Periodically audit reported data to ensure quality control *Measures for increasing financial capacity of SANS actors:* ▪ Measure 4: Establish payment-for-data agreements with SANS actors **Reducing the capacity demands posed by an M&E system** *Measures for reducing the capacity demands of data processing:* ▪ Measure 5: Utilise existing indicators in data collection ▪ Measure 6: Reduce the scope of data collection ▪ Measure 7: Reduce the periodicity of data collection ▪ Measure 8: Enhance flexibility in data collection *Measures for reducing the capacity demands of data processing:* ▪ Measure 9: Simplify data processing procedures ▪ Measure 10: Allocate responsibility for data processing data processing to organisations with greater technical capacities *Measures for reducing the capacity demands of reporting:* ▪ Measure 11: Align reporting cycles with the reporting cycles of related M&E systems ▪ Measures12: Ensure that reporting infrastructure is intuitive and user-friendly
Increasing the motivation of SANS actors to participate	*Measures for creating or strengthening mandates for SANS actors to participate in the M&E system:* ▪ Measure 13: Put in place legislation or policy that mandates the M&E of the policy ▪ Measures 14: Make agreements with SANS actors concerning the provision of data *Measures for enhancing the M&E system's utility to SANS actors:* ▪ Measure 15: Adjust the design of the M&E system so SANS actors are collecting data that is more relevant for them ▪ Measure 16: Add additional features to the M&E system *Measures for creating additional incentives for participating in the M&E system:* ▪ Measure 17: Establish positive and negative incentives for participating in the M&E system *Measures for raising the awareness of M&E system amongst SANS actors:* ▪ Measure 18: Undertake communication and advocacy activities

5.1 Ensuring SANS actors are able to participate in the M&E system

As presented in section 3, the ability of SANS actors to participate in an M&E system will be determined by the relationship between the capacities required to carry out their tasks under the M&E system (i.e., human and financial resources, equipment and expertise) and the extent to which SANS actors already possess these capacities. Consequently, during the development of an M&E system, lead agencies need to be mindful that the processes they put in place to facilitate the data collection–reporting process are not overly demanding for those expected to implement them.

These considerations are particularly pertinent when integrating SANS actors that would typically have lower capacities – e.g., local businesses, CSOs and NGOs. In such cases, capacity – or a lack thereof – is more likely to represent a major barrier to their participation in the M&E system.

Managing shortfalls in capacity

When stakeholder consultations or CNAs suggest that SANS actors lack certain capacities required to collect data for the M&E system, lead agencies will need to act to avoid a scenario in which the burden posed by the M&E system prevents – or actively deters – these actors from participating. Avoiding the risk of overburdening SANS actors can be addressed through implementing measures that achieve one of the following two outcomes:

- increasing the capacity of SANS actors in the areas where it is lacking, or
- reducing the need for SANS actors to possess this capacity

Measure for increasing the capacity of SANS actors will vary greatly, depending on which dimension of capacity they are intended to target. In all cases however, it involves providing SANS actors with resources (e.g., staff availability, expertise, equipment or budget) that they need to fulfil their responsibilities under the M&E system, but do not currently possess.

Reducing the need for SANS actors to possess this capacity meanwhile, is achieved through making alterations to the present design of the M&E system that reduce the time, expertise, equipment and budget that SANS actors are required to possess/use to carry out their tasks under the system.

From the perspective of the lead agency, both these approaches are likely to involve accepting trade-offs, either: in relation to increases in the resources required to develop and operate the M&E system (e.g., caused by the need to use additional resources to build the capacities of SANS actors) or in relation to decreases in the M&E system's technical performance (e.g., caused by compromises made to the design of indicators to reduce the resources or expertise required to collect them).

In light of these trade-offs, it is most likely that managing shortfalls in capacity is likely to involve a combination of these two approaches. Finding a suitable balance between the two is likely to be an iterative process, requiring lead agencies to explore different options in continued consultation with the affected SANS actors.

5.1.1 Ensuring that SANS actors have sufficient capacity to participate in the M&E system

The following section presents and discusses measures that can be implemented to increase the capacity of SANS actors so they can participate in the M&E system. The measures presented are organised according to whether they address human or financial capacity. Thus, this section is ordered as follows:

- Measures for ensuring sufficient human capacity amongst SANS actors (section 5.1.1.1)
- Measures for ensuring sufficient financial capacity amongst SANS actors (section 5.1.1.2)

5.1.1.1 Measures for increasing human capacity within SANS actors

Introduction

In most cases, the efforts to increase human capacity amongst SANS actors will centre around:

In most cases, the efforts to increase human capacity amongst SANS actors will centre around:

- providing guidance and training (measure 1)

Guidance and training should be used by lead agencies to provide relevant individuals from SANS actors with the skills, knowledge and expertise required to collect data required by the M&E system, in the manner stipulated in the M&E plan. As illustrated in Figure 3 (section 2.2) capacity building should take place before the M&E system is operationalised. Thus, the development of guidance and training resources should be completed and rolled out before this point.

While guidance and training are likely to represent the cornerstone of human capacity building efforts, lead agencies can also implement complementary measures that can build – and help maintain – human capacity, once the M&E system has been operationalised. These include:

- Providing continuous technical support (measure 2)
- Establishing processes for data verification and auditing (measure 3).

During the operationalisation of the M&E system, these mechanisms and processes can help identify and address any persisting capacity gaps and reduce the attrition of capacity caused by inevitable events such as staff turnover.

These measures are described and discussed below.

Measure 1: Provide SANS actors with guidance and training

Providing relevant individuals from SANS actors with some form of training or guidance prior to their involvement in operationalising the M&E system represents a key prerequisite in enabling them to carry out their tasks under the system successfully.

This will be the case for all M&E systems, regardless of how simple and limited the tasks allocated to SANS actors are. This is because when an M&E system is first developed, the individuals assigned to work on the M&E system will be unfamiliar with the system, its aims and the specific processes that they are being asked to carry out. As such, without any form of initial training or guidance, these individuals are highly unlikely to know what data to collect, how to collect it, or where, when and how to report the data. Even in cases where individuals are *only* being asked to repackage datasets they are already collecting, individuals allocated the responsibility for doing this will need some form of guidance to know what the appropriate format to repackage this data into, and when and where to report it.

The extent to which individuals will require guidance or training will depend on how technically demanding the tasks being assigned to these individuals are, and the extent to which these individuals already possess the relevant skills and knowledge required to execute these tasks. For example, in situations where the assigned tasks are relatively simple and not dissimilar to tasks that SANS actors are already carrying out (e.g., if SANS actors are being asked to collect simple indicators that can easily be added to existing data collection processes) then the level of training and guidance required is likely to be much less than if SANS actors are being asked to collect entirely new indicators – where they will need to become familiar with new data collection processes, learn new skills (e.g., how to apply relevant methodologies) and, in some cases, significantly increase their knowledge of the issues being addressed by the policy (e.g., how climate impacts are affecting a certain sector).

Guidance and training can be provided through a range of formats, varying from "light-touch" resources such as information sheets that can be developed relatively easily by lead agencies, to much more intensive formats such as training courses and programmes that can be resource intensive and will likely need to be outsourced to specialist providers (e.g., consultancies or universities). Generic formats for providing guidance and training include:

- Information sheets
- Instructions manuals
- Online courses
- Training events/courses

Which format – or mix of formats – is appropriate in a given context, will depend on the nature of the capacity gap that requires bridging. For example, if SANS actors are required to implement relatively simple processes that require relatively little specialist expertise, then written guidance provided in the form of – for example – information sheets or instruction manuals should suffice. However, if they are required to learn specialist skills (e.g., how to apply specific methodologies) or knowledge, then in-person or online training, where participants have access to technical specialists who can guide them through the learning process, will be more appropriate.

Detailed descriptions of the formats presented above and when they are appropriate are provided in Table A.1, Annex 1.

Good practice: Ensuring guidance and training is well-targeted, proportionate and cost-effective

As aforementioned, providing appropriate guidance and training to those expected to participate in the M&E system is critical step in ensuring that the system is successfully operationalised. However, guidance and training resources can be relatively costly to develop and roll-out; particularly if they involve developing and running in-person training events. Consequently, to avoid the human capacity building becoming financially unfeasible, capacity building efforts need to be well-targeted, proportionate and cost-effective.

To best ensure that this is case, lead agencies should consider the following:

1. Ensure that the focus of guidance and training is informed by a capacity needs assessment

A CNA is structured assessment of the capacity of an organisation. When developing M&E systems, they can be used to identify capacity gaps that need to be addressed before an actor is able to meaningfully participate in the system. Using the outcomes of a CNA to inform the development of guidance and training resources should help ensure that these resources (i) address the genuine human capacity needs of their target audience, and (ii) are in the appropriate format (i.e., provide appropriate levels of instructor contact-time and support) to address these capacity needs adequately (a link to a tool for conducting CNAs for M&E systems can be found in Box 6, section 4.2).

2. Develop a bespoke training strategy to guide

A comprehensive training strategy should seek to build the human capacities of all the actors involved in operationalising the M&E system, including those that are expected to analyse and synthesise the data (e.g., the lead agency or technical specialists) and those expected to use the system's outputs (e.g., policy-owners and other end-users).

Developing a training strategy for the M&E system will provide lead agencies with an overview of all the human capacity building activities they are planning to implement and allow them to ensure that collectively, they meet all the requirements identified by the CNA. Furthermore, it will enable them to properly coordinate between different training activities to exploit synergies and reduce inefficiencies. Finally, it will allow lead agencies to cost training activities and therefore ensure that the approach to training pursued is the most cost-effective option available and sustainable in the context of the budget available for these activities.

Good practice: Ensure that the human capacity built by training is sustainable overtime

Human capacity built through guidance and training activities will be eroded overtime as trained individuals either leave their organisation or move to a new position internally. Furthermore, the short-term success of training activities can be undermined by inevitable events such as dropouts and no-shows; something that is particularly likely in training formats that require significant time commitments. Consequently, to be able to ensure that SANS actors have sufficient capacity in both the short-term and long-term, training activities need to be ongoing (i.e., held periodically) and should aim to train more people than is required (i.e., create a surplus of staff).

Measure 2: Provide SANS actors with access to continuous technical support

Providing continuous technical support essentially means establishing some form of mechanisms through which individuals within SANS actors can access technical assistance on an ad hoc basis (i.e., as and when it is needed). Access to technical support can be provided in a number of ways however, two potential formats are:

- **Establishing a helpline** – lead agencies establish a centralised contact point (e.g., an email address or telephone number) through which SANS actors can contact them with requests for technical assistance.

- **Establish a peer-to-peer forum** – lead agencies create an online forum in which individuals involved in the M&E system can post questions related to their responsibilities under the M&E system for other users to answer. When successful, such forums can provide a space for individuals involved in the M&E system to discuss common challenges and learn from each other, something that can 'lighten' the need for centralised capacity building efforts. However, successfully stimulating demand for such forums can be difficult –plenty of examples exist of this approach failing due to the forum being unable to attract a critical mass of users (this is particularly a risk in smaller M&E systems). However, the risk of failure can be reduced by integrating forums into pre-existing platforms already used by SANS actors in relation to the M&E system (e.g., the website into which SANS actors are already uploading data collected under the M&E system).

Providing access to continuous technical support should be seen as complimentary to – and not as a substitute for – providing guidance and training In many cases, it will represent a relatively low hanging fruit that can be utilised to improve the quality and timeliness of data being reported by SANS actors.

Additionally, it is also likely to highlight any flaws or common challenges in the M&E system's design that were missed during the pilot phase of developing the M&E system, enabling lead agencies to make any required adjustments sooner rather than later.

Measure 3: Establish processes for verification and auditing data reported by SANS actors

Verifying or auditing (samples of) data reported by SANS actors allows lead agencies to ensure that data quality is adequate for use and the procedures established in the M&E system are being adhered to (Hatry, 2012). Integrating such processes into an M&E system can have a number of wider benefits for the system that go beyond building the capacity of SANS actors to participate. For example, the knowledge that data will be actively audited by the lead agency can represent an important disincentive that prevents SANS actors from gaming the data they report so that they meet their targets, avoid scrutiny or generally look like they are performing better than they are (Mackay, 2007). In turn, having this disincentive in place can have positive implications for the credibility of data generated by the M&E system, something that may encourage its use amongst the systems various intended end-users (*ibid*).

While the quality control dimension is typically the primary purpose of embedding processes for data verification or auditing into the design of an M&E system, the checking of data being collected and reported by SANS actors can serve an important human capacity building function. Feedback from verification or auditing processes related to data quality can facilitate a learning-by-doing process, in which individuals within SANS actors become aware of mistakes they are making and can therefore work to rectify them going forwards. Furthermore, periodically auditing data reported by SANS actors can identify any flaws in the M&E system's design that were not 'ironed out' during the M&E system's pilot phase and highlight any lingering capacity gaps that partners may have, even after receiving guidance and training.

5.1.1.2 Measures for increasing financial capacity of SANS actors

Introduction

Finance represents an important precondition for SANS actors to participate in an M&E system as it is required for them to mobilise the other resources required to collect and report data. For example, finance is required to pay for both the time of staff allocated to work on the M&E system and the equipment and software required to collect, process, store and report data. Given this crucial role in enabling participation, if actors are unable or unwilling to make the required financial resources available, they will struggle to participate in the M&E system.

In most cases, the default position would be that SANS actors finance their own participation in the M&E system, using existing funding earmarked for the implementation adaptation activities they are being asked to report on under the M&E system.[2]

This expectation would be particularly realistic if the funding for these activities is coming from the policy-owners as, in such scenarios, recipients of funding would generally be expected to account for how the funding was used through some form of reporting process (which they would presumably be asked to do using the M&E framework being developed for the policy).

As highlighted in section 3.3 however, actors are sometimes sceptical about M&E, often seeing it as an ineffective use of resources or – in worst case scenarios – a means of unfairly holding them accountable if the activities they are implementing do not lead to the desired results. As a result, actors are not always enthusiastic about using their own financial resources for the purposes of collecting data and reporting, and may be tempted to under-finance M&E activities to the extent where data quality is compromised.

In light of this, regardless of how the adaptation activities being monitored and evaluated are being financed, lead agencies need to ensure that actors that are expected to provide data to their M&E system are sufficiently motivated to do so (measures to increase the motivation of SANS actors are presented and discussed in section 5.2).

In cases where a data provider does not already receive finance from the policy-owners and it is not possible to motivate them to finance their own participation in the M&E system, lead agencies can provide the required finance through:

- establishing payment-for-data agreements with SANS actors (measure 4)

This measure is described and discussed below.

Measure 4: Establish payment-for-data agreements with SANS actors

Payment-for-data agreements are agreements made between lead agencies and data suppliers that facilitate the payment of a fee to SANS actors for their data (CGE, 2020). Financing arrangements such as this should be included as clauses within broader written agreements made between the lead agency and the data supplier that relate to their participation in the M&E system. Formats of written agreement that could host such a clause include Data Sharing Agreements (DSAs) and Memorandums of Understanding (MOUs) – both of which are described in more detail in measure 14.

Instigating a payment-for-data model is unlikely to be desirable – or feasible – in all situations. It is commonly proposed as a solution for securing regular Greenhouse Gas (GHG) emissions data from individual actors that are able to provide large datasets, where it represents an efficient way of securing long-term collaboration (CGE, 2020). However, in situations where the size of datasets is not so large and/or where data needs to come from many individual actors (as might be the case when data is being sourced from subnational actors), establishing bilateral payment-for-data agreements and

[2] Görgens and Kusek (2009) recommend that this figure is between 7-10% of the overall budget.

managing subsequent financial transactions might become – logistically speaking – very burdensome, to the extent where it is unfeasible from the perspective of the lead agency. Furthermore, not all potential data providers would be willing to engage in legally binding commitments – even if doing so can provide them with a new source of revenue. When this is the case, it invariably rules out the possibility of engaging in a payment-for-data model.

5.1.2 Measures for reducing the capacity demands posed by an M&E system

Reducing the capacity demands posed by the M&E system refers to the act of making alterations to the design of the M&E system so that SANS actors require fewer resources to collect and report the data they are being asked to provide.

Where possible, reducing the reducing the capacity demands posed by the M&E system should always be an objective for lead agencies regardless of whether the burden posed by the M&E system is prohibitively high or not. This is because, while there will be definitive 'hard limits' to what a actors are capable of doing, it will always be beneficial to reduce the burden imposed on them by the M&E system if it can be done through making 'efficiencies' that do not have negative impacts on the system's performance (i.e., making the 'efficiencies' do not have decrease the ability of the M&E system to produce robust and relevant analysis). Moreover, where the aforementioned 'hard limits' to an actor's capabilities lie will be dynamic, rising and falling in response to different events that typically befall organisations of all kinds (e.g., budget cuts, staff departures, changes in management priorities). Thus, reducing the capacity demands posed by an M&E system will enhance the system's resilience to such events and increase its long-term sustainability.

For SANS actors, the capacity demands placed on SANS actors by an M&E system can be reduced by developing (or if already developed, making adjustments to) data collection–reporting processes that are either (i) simpler and more intuitive than they otherwise would be, or (ii) exploit synergies with the existing data collection–reporting processes that are already being carried out by the SANS actors for other purposes.

In M&E systems, data collection–reporting processes can be modelled as being composed of three stages: 1. data collection, 2. data processing[3] and 3. reporting. Measures to reduce the capacity demands posed by an M&E system presented in section 5.1.2 are organised by their applicability to these three stages.

5.1.2.1 Measures for reducing the capacity demands of data collection

Introduction

Collecting data typically represents the most resource intensive part of the broader data collection–reporting process. As such, in cases where lead agencies believe data collection–reporting processes are too burdensome for certain actors, reducing the capacity demands associated with data collection represents a sensible starting point. Data to be collected by the M&E system is specified in the M&E framework, a component of the M&E plan that specifies the indicators that need to be collected, who is responsible for their collection, and how and how often collection needs to take place. When developing or adjusting the M&E framework, the burden of collecting data can be reduced through the following measures:

- Utilising existing indicators in data collection (**measure 5**)
- Reducing the scope of data collection (**measure 6**)
- Reducing the periodicity of data collection (**measure 7**)
- Enhancing flexibility of data collection (**measure 8**)

These measures are described and discussed below.

[3] Data processing describes the process of amalgamating individual metrics into an indicator. In cases where indicators are made up of one metric, this stage will not be required.

BOX 7

Experiences from ICAT projects: Challenges in utilising existing indicators

Under the ICAT project, the Dominican Republic is developing a system designed to monitor and evaluate adaptation measures implemented in the agriculture and tourism sectors. To minimise the cost of the operating the M&E system, the system will prioritise indicators that are already being collected for other purposes by the M&E system's key stakeholders. As such, prior to selecting indicators a mapping exercise was conducted, assessing pre-existing M&E systems to identify indicators that could be repurposed to monitor the adaptation measures.

However, in pursuing this strategy, it was found that existing indicators could not cover all of the M&E system's information needs, meaning – in some cases – new indicators needed to be developed. Furthermore, some indicators that were initially identified as 'relevant' were found to be missing a climate variable that would make it suitable for tracking adaptation outcomes (e.g., indicators for monitoring crop yields did not include data relating to climate events [e.g., rainfall, drought etc.] that would enable them to capture crop yields in the face of climate stress). It was also found that not all of the existing indicators identified in the mapping exercise were actually being collected in practice. In fact, some of these indicators were not even fully developed – e.g., the specific metrics that will form the indicator have yet to be determined. Thus, while utilising pre-existing indicators could be used to reduce the cost of data collection for the M&E system, the issues described above meant that the need to adjust or further develop existing indicators and develop new indicators, could not be completely negated.

Similarly, in their work developing a M&E framework for the South African government to monitor loss and damage caused by extreme weather events, the Council for Scientific and Industrial Research (CSIR) found that while loss and damage data was being collected at different spatial and temporal scales, using various indicators and methodologies, there was a need to consolidate data collection and reporting processes to allow for a standardized central loss and damage database. This meant that before these indicators could be aggregated and analysed by a national-level M&E system, work needed to be done to harmonise the collection of these indicators across all jurisdictions.

Measure 5: Utilise existing indicators in data collection

The most obvious means of reducing the capacity demands associated with collecting data is to utilise indicators from other M&E systems. This is approach is commonly adopted in government-owned M&E systems – particularly in developing countries – as it can significantly reduce the additional operating costs associated with collecting additional indicators (Hammill and Dekens, 2014; Naswa et al., 2015).

To implement this approach effectively, ahead of selecting potential indicators, lead agencies need to spend time mapping the existing M&E systems within relevant sectors to ensure that they have a full overview of what is already being collected by relevant government and non-state actors. Once this overview has been obtained and potential indicators identified, due diligence processes need to be applied to potential indicators to identify whether these indicators are ready-to-use.

Performing some form of due diligence is important as pre-existing indicators commonly require further adjustment or development before they can be successfully repurposed for use in another context. Likewise, there are also no guarantees that indicators from existing systems will be able to adequately capture everything that the M&E system is intended to monitor. In such cases, new indicators will need to be developed from scratch. Examples of practical challenges experienced in using pre-existing indicators during the implementation of ICAT supported projects are presented in Box 7.

Good practice: Utilising indicators from international frameworks

When looking for existing indicators that can be utilised by the M&E system being developed, lead agencies should consider investigating what indicators are being collected for the purposes of reporting to international frameworks relevant to the policy being monitored and evaluated. Most – if not all – international frameworks require signatories to report periodically on what they are doing to fulfil its goals. As a results, countries involved in these frameworks are often engaged in at least some form of data collection and reporting. If this is the case, countries may be regularly collecting indicators that can be used in the M&E system being developed.

Amongst others, international frameworks with strong relevance to adaptation include: the Sendai Framework, the United Nations Convention to Combat Desertification, the United Nations Convention on Biodiversity, the Sustainable Development Goals, and the United Nations Framework Convention on Climate Change and the Paris Agreement.

Measure 6: Reduce the scope of data collection

Another means of reducing the capacity demands associated with data collection is to reduce the scope of data being collected under the M&E system. The most obvious means of doing this is to reduce the number of indicators that the M&E system is designed to collect.

This approach is most appropriate to pursue when the proposed indicator framework contains a significant number of indicators that are not used later in the system or do not clearly meet the demands of the system's key end-users. While it may sound obvious, bloated indicator frameworks represent a common problem in newly developed M&E systems as lead agencies opt for quantity over quality (Mackay, 2007; Görgens and Kusek, 2009; Simister, 2019). When this occurs, it can lead to a situation where a lot of data is being collected that is simply not going to be used by the system's key end-users, essentially meaning much of the data is collected for the sake of collecting data.

Box 8 below provides a series of guiding questions that could be asked to inform processes to select or reduce the number of indicators.

BOX 8

Guiding questions that can inform indicator selection.

Guiding questions about an indicator's feasibility:

- Is it possible to collect information related to the indicator? If so, where will the information come from?
- Is the indicator likely to be reliable?
- What is the additional cost of properly collecting the indicator in terms of staff time and money?
- How often will the indicator need to be collected?
- Does the indicator require baseline information? If so, can it be obtained?
- Do SANS actors have the capacity or desire to collect the information honestly and accurately?

Guiding questions about an indicator's usefulness:

- How much can changes in the indicator be attributed to the activity being monitored?
- Will the indicator tell you anything you did not know before (i.e., does it address an existing information need)?
- Will the indicator support decision making to improve future performance?
- Will the indicator help to demonstrate accountability to different stakeholders?
- How else will collecting the indicator support the M&E system's stakeholders (if at all)?

Source: Adapted from Simister (2017)

When reducing the number of indicators, lead agencies should be aware that a major share of the burden of collecting data is not proportionately linked to the number of individual indicators they are being asked to collect. Instead, the burden of data collection is also determined by how many different sources the data comes from and how the indicators are collected. For example, it is typically more burdensome to collect fewer indicators from many different sources than it is to collect many indicators from a single source (Mackay, 2007). Likewise, some indicators will simply require more time, finance and technical expertise to collect than others.

Measure 7: Reduce the periodicity of data collection

In tandem with reducing the scope of data collection, reducing how often indicators need to be collected represents another means of reducing the burden of collecting data. Adopting this approach can be leveraged to reduce the amount of human and financial resources SANS actors are required to expend to collect data however, it will not reduce the requirements for these actors to possess a certain level of technical expertise or certain pieces of equipment and software.

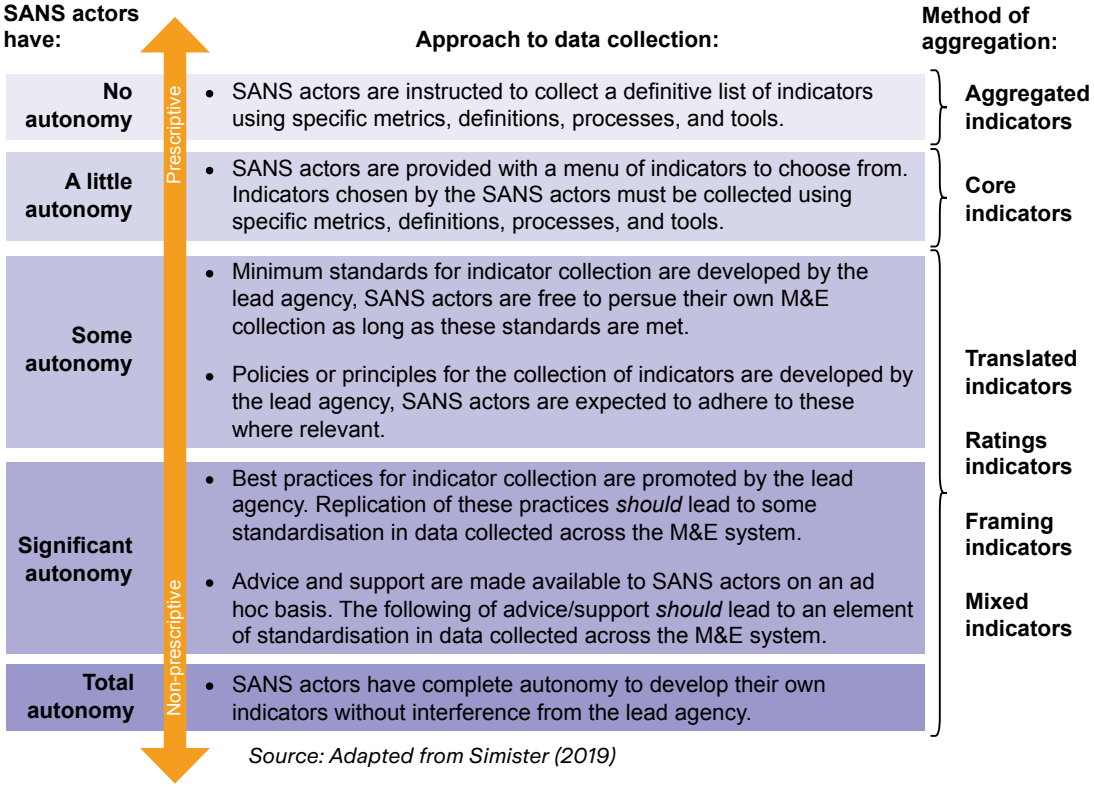
Measure 8: Enhance flexibility in data collection

A less obvious means of reducing the burden of data collection on SANS actors is to increase the amount of autonomy they have to determine what data they collect and how they collect it. Degrees of autonomy that can be granted to SANS actors can vary along a spectrum from:

- none at all – where SANS actors are simply instructed to collect certain indicators using specific definitions, processes, and tools, provided by the lead agency, to;
- complete autonomy – where SANS actors are free to develop their own indicators with their own definitions, processes, and tools.

In between these two extremes, there exists a range of approaches that provide SANS actors with increasing degrees of autonomy to choose which indicators to collect and how to collect them (see Figure 8).

Figure 8 Degrees of autonomy in data collection



Source: Adapted from Simister (2019)

Providing SANS actors with some level of autonomy over the indicators they collect will enable them to tailor their data collection activities so that they are more appropriate to the human and financial resources they have available; with the extent to which they are able to do this being linked to the degree of autonomy they are granted.

Furthermore, increasing autonomy over data collection also allows SANS actors to collect data that is more relevant to their own information needs. For instance, with greater levels of autonomy, SANS actors would be able to collect data that is more suited to supporting decision-making regarding the activities they are implementing. As is discussed later in measure 15, enhancing the extent to which data collected can be usefully used to support their own operations can increase the motivation that SANS actors have to participate in the M&E system.

The drawbacks of increasing autonomy for SANS actors however, is that it inevitably leads to the collection of data that is increasingly less standardised, which makes aggregating data more challenging and – when aggregated – increasingly limits the extent to which this data can be meaningfully analysed. In cases where significant or total autonomy is granted, there is likely to be a significant risk that the data being collected by different actors will not meet the minimum level of comparability to enable any form of robust aggregation or analysis; essentially preventing meaningful M&E of the policy at the national level. Similarly, in the absence of cross-system standards being either recommended or mandated by the M&E system, there is also a risk that the reliability of the data provided to the system may also be too poor to use.

Issues relating to aggregation can be negated through the use of translated, ratings, framing and mixed indicators that allow non-standardised information collected at lower levels to be aggregated upwards in a manner that allows outputs and outcomes to be monitored at higher levels (including the national level – Box 9). These methods for processing non-standardised indicators however, all come at some cost regarding the granularity of the data being aggregated and the extent to which it can be analysed. Moreover, these solutions are not always easy to implement, integrating them into an M&E system will often add additional costs, and each of the different approaches are only appropriate in certain situations.

BOX 9

Further resources on aggregating non-standardised data.

A more detailed explanation of the different indicator-based solutions for aggregating non-standardised data touched upon in the paragraph above can be found in section 2 of the working paper by Simister (2016).

The target audience for this working paper are international NGOs that are interested in summarising the outputs and outcomes of their portfolios of work carried out across different regions, countries and sectors. However, given the similarities in the challenge faced by international NGOs and national governments when it comes to aggregation, its contents are also relevant to lead agencies charged with developing systems for the M&E of national policies.

While challenges associated with aggregating non-standardised indicators may appear to be daunting, it is important to consider that aggregating standardised indicators is not always as straightforward as it might initially seem. While aggregation to the national level can be achieved through the relatively simple process of finding the sum total of all the figures derived at lower levels of the M&E system; this approach is only robust if all actors involved in collecting indicators collect them in exactly the same way (i.e., indicators need to use the same metrics, definitions, processes, and tools in the data collection process). If these conditions are not widely met across the system, there is a significant risk that any value attached to aggregated indicators – and any analysis of these aggregated indicators – will be largely meaningless. Ensuring that data is collected in a uniform manner by all actors reporting to

the M&E system can be hard to ensure; particularly when the system is relying on many different SANS actors that are operating in highly variable jurisdictions, with varying levels of capacity and motivation to participate in the M&E system.

5.1.2.2 Measures for reducing the capacity demands of data processing

Introduction

Once indicators have been collected, it is sometimes necessary to further "process" them to make them useful to the M&E system. Processing indicators is necessary when M&E systems want to:

- Combine multiple different indicators to form a composite indicator or indices. This is useful when M&E systems want to measure complex concepts such as vulnerability or resilience that cannot be captured by indicators that measure a single variable.
- Translate a range of single quantitative indicators into a single common indicator or translate qualitive information into a single common quantitative value. This is sometimes required to enable information across different jurisdictions or projects to be comparable or aggregable.

While the need for M&E systems to process data can sometimes be unavoidable, requiring SANS actors to process the indicators they have collected will naturally add to the overall burden that the system is placing on them. When it is particularly technical – i.e., requires certain expertise and skills to undertake – lead agencies may find that data processing is sometimes beyond the capabilities of the SANS actors. This is particularly likely to be the case when the SANS actors in question do not possess strong technical expertise in data analysis (e.g., as is likely to be the case with local governments, businesses, CSOs and NGOs).

Where this is the case, lead agencies can look to lighten or remove this burden by:

- Simplifying data processing procedures (measure 9)
- Allocate responsibility for data processing to organisations with greater technical capacities (measure 10)

These measures are discussed below.

Measure 9: Simplify data processing procedures

Simplifying data processing procedures represents the most obvious means of reducing the capacity demands associated with data processing. It essentially involves adjusting data processing procedures, so they are less technically demanding and time consuming, but still capable of producing indicators that are capable of performing the intended function within the M&E system. When possible, achieving this will likely involve accepting that the outputs of simplified data processing procedures will be data that is "less appropriate" for M&E. This trade-off, however, may be preferable to receiving "more appropriate" data that is untrustworthy because it is being processed by individuals who do not possess the required expertise.

Measure 10: Allocate responsibility for data processing to organisations with greater technical capacities

An alternative to simplifying data processing procedures is to transfer the responsibility for processing raw data to a centralised actor that already possesses the technical expertise to undertake this work (e.g., universities or consultancies) or to the lead agency, where capacity – if it does not already exist – can be built more easily and efficiently.

Lead agencies considering this measure should be aware that "outsourcing" this work to universities and consultancies can involve significant costs. Furthermore, taking this task away from SANS actors will mean that these actors will not be able to benefit from using processed data in their own operations (e.g., to support decision-making, strengthen communication with their stakeholders etc.). As these benefits are sometimes valued by

SANS actors (see Box 4, section 3.2), their absence might represent a missed opportunity to bolster their motivation to participate in the M&E system.

5.1.2.3 Measures for reducing the capacity demands of reporting

Introduction

Reporting data describes the process in which data collected and processed by SANS actors is stored and subsequently transferred to another organisation; either the lead agency or another organisation "higher up" the M&E system.

The process of reporting is facilitated by a "reporting system", the development of which involves two interrelated sub-processes:

- The development of the protocols for reporting, and;
- The development of the reporting infrastructure (i.e., the reporting templates, tools, and platforms in which data is inputted, stored and transferred).

While not as resource intensive as the process of collecting or processing data, reporting still requires time, effort and finance to carry out. Therefore, reducing the burden posed by reporting represents an additional area where lead agencies can intervene to reduce the overall burden that the M&E system is placing on SANS actors.

As the design of reporting systems are inextricably linked to the characteristics of the data they are designed to transfer between actors, many of the fundamental aspects of reporting systems are pre-determined and cannot be meaningfully altered without making adjustments to the M&E framework (e.g., if the M&E framework contains many indicators, reporting systems will need to facilitate the transfer of a large number of indicators). While this is the case however, the additional burden posed by reporting can be reduced through certain "soft" measures, including:

- Aligning reporting cycles with the reporting cycles of related M&E systems (measure 11), or;
- Ensuring that reporting infrastructure is intuitive and user-friendly (measure 12)

These measures are discussed below.

Measure 11: Align reporting cycles with the reporting cycles of related M&E systems

Many SANS actors engaged to provide data to an M&E system will already be periodically reporting related data – if not the same data – to national government actors and other stakeholders (e.g., donors). When this is the case, the burden of reporting can be reduced through aligning reporting cycles so these actors are able exploit the efficiencies associated with performing similar reporting processes alongside one another.

While aligning reporting cycles with related reporting processes would be optimal, there are logistical reasons can mean that doing so may not be possible. For example, M&E systems often have deadlines relating to when they need to publish their outputs (e.g., a final report). If meeting these deadlines means that data has to be received by the actors preparing the output by a certain date and this date does not align with the reporting cycles of related M&E systems, then it is unlikely that this alignment can take place.

Measure 12: Ensure that reporting infrastructure is intuitive and user-friendly

Once reporting protocols and infrastructure have been developed, there is inevitably a bedding in period while staff become familiar with the new system. The length of this 'bedding in period' will be influenced by the complexity, intuitiveness, and user friendly-ness, of the system developed.

While the complexity of a reporting system will – to a certain extent – be determined by the indicators being collected by the M&E system, ensuring that reporting systems are intuitive and user friendly

represents an obvious – albeit sometimes overlooked – low hanging fruit. This can be achieved through relatively simple good practices, such as ensuring that:

- reporting templates, tools and platforms are tidy and well formatted
- instructions for carrying out reporting processes and for using reporting templates, tools, and platforms are comprehensive, clear, and concise, and provided in local languages (if relevant)

To ensure that these good practices are employed, lead agencies should explicitly investigate these issues in collaboration with their intended users (i.e., reporting SANS actors). Doing this would likely be most appropriate during the "pilot phase" of developing the M&E system (see Figure 4 and 6).

5.2 Enhance the motivation of SANS actors to participate in an M&E system

While a data provider may possess the capacity to carry out tasks allocated to it under an M&E system, it does not necessarily mean that they will be willing to allocate the resources required to do so. Instead, the willingness of an actor to participate in an M&E system will be determined by the extent to which they view the burden posed by the system as being justified by the reasons motivating them to participate in it.

Consequently, lead agencies should – to the extent possible – seek to create conditions in which SANS actors are motivated to participate in the M&E system. Failure to consider the importance of motivation when developing an M&E system may result in a situation where the SANS actors that are expected to collect and report data to the system fail to understand why they should do so. In this situation, such actors are more likely to under-resource data collection and reporting (potentially compromising the quality of data collected) or fail to participate in the system at all.

Creating the correct conditions for the participation of SANS actors

Increasing the motivation of SANS actors to participate in an M&E system can be achieved through implementing specific measures that do one or more of the following (Mackay, 2007):

- establish push factors for participating in the system
- establish pull factors for participating in the system
- raise awareness amongst SANS actors of the M&E system and its benefits

There are a wide variety of different measures available to lead agencies that can be used to establish push and pull factors or raise awareness. These measures can be usefully arranged into four groups based on the broad underlying approach of how these measures motivate SANS actors to participate in the M&E system. These groups are measures that:

- create or strengthen mandates for SANS actors to participate in the M&E system (**section 5.2.1**)
- enhance the M&E system's utility to SANS actors (**section 5.2.2**)
- create additional incentives for SANS actors to participate in the M&E system (**section 5.2.3**)
- raise awareness of the M&E system and its benefits (**section 5.2.4**)

Potential trade-offs of motivation-enhancing measures

For lead agencies, implementing measures to increase the motivation to participate amongst SANS actors may involve accepting certain trade-offs. For example, enhancing the M&E system's utility for SANS actors may require changes to be made to the M&E system's design that either negatively affect its ability to achieve its overarching objectives or increase its running costs. Likewise, activities to raise awareness of the M&E system and its benefits amongst SANS actors or to create additional incentives to participate in the M&E system, will typically require lead agencies to expend additional resources that will ultimately put additional pressure on existing budgets for the M&E system's development and operationalisation.

5.2.1 Creating or strengthening mandates for SANS actors to participate in the M&E system

Introduction

Mandates for SANS actors to participate in the M&E system can be created or strengthened through putting in place the following:

- Legislation and policy that mandates the M&E of a specific policy (**measure 13**)
- Making agreements with SANS actors concerning the provision of data (**measure 14**)

The primary purpose of the two types of institutional arrangements listed above is to provide a group of actors with a framework for cooperation and coordination towards a shared objective. Within the framework established, an institutional arrangement will allocate responsibilities for performing certain roles and activities, and – in some cases – facilitate the allocation of resources between actors involved in the arrangement.

Once in place however, these institutional arrangements create a mandate for the actors involved in, or targeted by, these arrangements to fulfil their responsibilities under the arrangement. As outlined in section 3.2, actors are often keen to fulfil their mandates as failing to do so can result in them experiencing negative repercussions, including: legal action, fines, loss of funding, reputational damage and a loss of confidence and legitimacy from key stakeholders.

These measures are discussed below.

Measure 13: Put in place legislation or policy that mandates the M&E of the policy

A clear legal or policy mandate is important for the long-term – and often short-term – sustainability of the entire M&E system. In the absence of a clear legal or policy based imperative for M&E of a policy, key government stakeholders are unlikely to deem that they are able to allocate the not insignificant resources required to develop and then operationalise an M&E system; even if they ultimately perceive the system to be a worthwhile endeavour. Thus, without the presence of a clear legal or policy mandate, securing long-term finance and buy-in of key government stakeholders will be difficult.

Legal or policy-based mandates to monitor and evaluate a policy are generally created through ensuring that the policy that is to be monitored and evaluated contains an 'M&E clause' – an article in a legislative act or policy that contains provisions regarding how the intervention will be monitored and evaluated (European Union, 2021).[4] The primary aim of an M&E clause is to ensure that appropriate arrangements are put in place to track progress and/or evaluate the performance of the intervention. A comprehensive M&E clause would establish the basic building blocks of the M&E system, describing who is responsible for collecting the necessary information (i.e., which organisation is responsible for leading the development and coordination of the M&E system), how and when to collect the information, and when to produce M&E reports (*ibid*).

While the presence of an M&E clause does not directly create an explicit legal imperative for specific SANS actors to collect data on behalf of the M&E system. Its presence will serve as a clear indication to potential SANS actors that M&E of a specific policy is a government priority. This in turn can provide lead agencies with additional leverage to demand that relevant organisations collect and share the data required by the M&E system. Likewise, it can provide SANS actors with the justification to judge that they have a mandate to participate in the M&E system; therefore, enabling them to allocate the necessary resources to do so.

Conversely, without a clear and adequate legal or policy basis for the M&E system, potential SANS actors – particularly state actors such as subnational governments – may judge that they do not possess the necessary mandate to allocate their resources to participating in an M&E system; even if they were otherwise motivated to do so.

[4] An M&E clause is sometimes known as a review clause.

Limitations to legal or policy-based mandates

While often considered as a vital pre-requisite for successfully developing and operating a government-owned M&E system, simply having a legal or policy basis for an M&E system is often insufficient to guarantee the buy-in and cooperation of SANS actors (Mackay, 2007). This is likely to be particularly the case for non-state actors (e.g., NGOs, CSOs and businesses) – particularly, those operating at subnational and local levels – as they are less likely to feel compelled to adhere to national legislation or policy; particularly if it does not explicitly mandate them to do so (see Box 10).

BOX 10

The United Kingdom's Adaptation Reporting Power

The Adaptation Reporting Power (ARP) is a clause contained within the United Kingdom's (UK) Climate Change Act established by the UK government that makes it a legal requirement for the Department for Environment, Food and Rural Affairs (DEFRA) to periodically collect data from key infrastructure providers, industry regulators and public bodies concerning their exposure to present and emerging climate risks and the actions they are taking to adapt to these risks. The purpose of collecting this information is to serve as an input into the UK's periodic Climate Change Risk Assessment.

In the second cycle of reporting under the ARP conducted in 2017, 102 organisations were engaged. However, as reporting by these organisations was not a legal requirement, around a quarter of these organisations failed to provide the requested information. Thus, while the ARP provides a clear legal basis for collecting adaptation-related data from certain actors, the fact that this legal requirement to collect data only applied to DEFRA meant that a significant number of the actors asked to provide data chose not to do so.

Source: Climate Change Committee (2017); Dale et al. (2021)

Good practice: Find a high-level champion for the M&E system

While the mandate created by an M&E clause will create a push factor in of itself, lead agencies can amplify the strength of this push factor by finding a high-level champion for the M&E system.

What is a high-level champion?

A high-level champion is a high-profile and influential individual, situated close to relevant decision-making processes, who acts as a strong advocate for the development of an M&E system for a particular policy.[5] To be effective, high-level champions need to be positive about and fully understand the benefits of using data for decision-making. The presence of high-level champions is considered to be an important pre-requisite to building and maintaining buy-in for an M&E system amongst the system's stakeholders, including the actors expected to operationalise it (Kusek and Rist, 2005; Mackay, 2007; Görgens and Kusek, 2009).

The impact of having a high-level champion is generally most prominent in the stages preceding the development of an M&E system, when high-level discussions are being held about whether an M&E system is wanted/needed, and whether the key government stakeholders are willing to dedicate the required resources to develop and operate an M&E system. In these early phases, an influential champion can represent the difference between decision-makers approving the development of an M&E system and deciding against the idea.

[5] What constitutes a "high-level" in government will depend on the political significance of the M&E system being developed and the resources required to develop and operationalise the system. For example, an effective high-level champion of an M&E system monitoring and/or evaluating a sectoral policy could be an influential individual close to decision-making within the ministry that owns the policy. However, for much larger M&E systems – e.g., an M&E system for a national adaptation plan/strategy – a high-level champion would need to be a highly influential individual close to decision-making in a powerful institution with influence over all of government, such as the president or prime minister's office.

Following this initial hurdle however, the presence of a high-level champion will continue to be important for preventing momentum surrounding the M&E system from being lost overtime, which they can do in two main ways.

Firstly, the presence of a champion can be important in keeping the M&E system on the political agenda, with their continued leadership and advocacy potentially even reinforcing the notion that the development and operationalisation of an M&E system – and the use of data produced by this system – is an active priority for the government (not just a priority on paper). The continued engagement provided by a high-level champion after initial approval can be extremely important for the sustainability of the M&E system being developed, particularly if there are likely to be other influential individuals who are opposed the prospect of M&E and thus, would be interested in derailing the system.

Secondly, a high-level champion will be able to, and will likely be motivated to, hold the actors participating in the M&E system (including the lead agency) to account for its development and subsequent performance. For SANS actors, the idea that influential figures in high-levels of government are invested in the M&E system is likely to provide additional motivation for them to participate in the M&E system and ensure that it is properly operationalised. This is particularly likely if SANS actors are (i) part of the country's government structure (e.g., they are from subnational government) and are therefore – on some level – answerable to the national government, or (ii) want to establish or maintain productive relationships with the national government (as can often be the case with large businesses or NGOs).

Measure 14: Make agreements with SANS actors concerning the provision of data

In the context of supplying data to an M&E system, agreements can be understood as mutually-agreed arrangements that provide two or more parties with terms of reference to collaborate with each other for the purposes of collecting data to monitor and evaluate a policy.

Once in place, agreements should represent a commitment that should 'push' parties to abide by their responsibilities under the agreement and increase the level of trust that they have in the other party to deliver on their responsibilities. Table 2 presents the typical responsibilities one would expect to be contained within agreements designed to facilitate data sharing.

Table 2 Example of responsibilities contained within agreements designed to facilitate data-sharing

Responsibilities of data suppliers	Responsibilities of lead agencies
▪ Provide requested data in an agreed format at a given periodicity.	▪ Provide capacity building support. ▪ Provide any knowledge products stemming from the M&E system (*if applicable*). ▪ Provide financial support or renumeration (*if applicable*). ▪ Abide by any confidentiality agreements (*if applicable*).

The trust and commitment built through the process of developing agreements with data suppliers will help secure the long-term provision of data from SANS actors. Furthermore, acknowledging the value of their data in an agreement can strengthen the desire of SANS actors to devote internal resources to its collection and analysis (CGE, 2020).

Agreements can be formal or informal, written or verbal, and legally binding or not, and can vary in terms of how detailed they are. As such, they can come in a wide range of formats. Common types of agreement used to facilitate the supply of data in M&E systems are presented in Figure 9.

Figure 9 Common types of agreement used to facilitate the supply of data in M&E systems

- **Data-Sharing Agreements** (DSA) – a specific agreement made between two parties that makes a formal, potentially legally-enforceable, agreement regarding the supply of specific datasets from one actor to the other. A DSA document would specify the precise data to be delivered, the format it is to be delivered in, deadlines for delivery, and any additional terms and conditions associated with the agreement (e.g., processes of analysis and QA/QC to be applied to the data, capacity building support and payments [financial or in-kind] to be made to the data supplier, confidentiality agreements, or dispute resolution agreements).

- **Memorandums of Understanding** (MOUs) – a type of agreement made between two or more parties that expresses a shared desire to achieve certain objectives through cooperation and collaboration. An MOU will generally specify the scope of cooperation, how this cooperation will take place (e.g., how data will be transferred or analysed, how frequently this will occur, and if resources [e.g., capacity building, finance] will be supplied by one party to the other) and, if relevant, any time limits on the applicability of the agreement. MOUs will not specify specific deliverables (i.e., as would be found in a standard service contract) and are not legally enforceable. However, due to the fact that they are recorded, MOUs generally have more weight than verbal agreements and are likely to have greater longevity.

- **Verbal agreements** – unwritten agreements made between two or more parties concerning how they will collaborate to achieve certain objectives. As verbal agreements are not documented, they are not legally binding. Furthermore, on account of being unwritten, their capacity to embody detailed terms of reference is limited. As such, they are generally shallow in terms of detail, usually limited to the core elements of an agreement.

Source: Author

Each type of agreement presented above has their own pros and cons relating to their strength (i.e., the extent to which they are able to guarantee collaboration), sustainability (i.e., their ability to endure overtime) and the amount of effort required to put them in place. Thus, the type of agreement that is most appropriate in a given scenario will vary on a case-by-case basis.

For example, as DSAs and – to a lesser extent – MOUs are viewed as being more formal, and in some cases legally binding, they tend to have more weight than verbal agreements and should therefore lead to greater compliance with the terms of the agreement by both parties. Likewise, the fact that these types of agreement are documented makes them more sustainable in the long-term, as their continued existence is not dependent on the understanding held by specific individuals who will – at some point – inevitably leave the organisation.

Conversely, the fact that MOUs and – particularly – verbal agreements are less detailed and non-binding means that they can be put in place quicker than DSAs. As such, they are less burdensome to put in place; something that may benefit lead agencies who need to put in place similar agreements with numerous different actors. Similarly, MOUs and verbal agreements could represent a "next best" solution if an organisation is not enthusiastic about either (i) engaging in a legally binding agreement, or (ii) view the process of developing such an agreement as unnecessarily burdensome – as might be the case if supplying data to the M&E system represents a relatively simple task.

5.2.2 Enhancing the utility of the M&E system to SANS actors

Enhancing the utility that the M&E system has for SANS actors refers to the act of making adjustments to the M&E system design to make the system's outputs (i.e., the data collected and analysis made by the system) more useful to the SANS actors providing data to it. If the outputs produced by an M&E system are viewed as useful by SANS actors, it is more likely that they will opt to use them within their own internal processes (e.g., to support relevant decision-making processes or as a means of demonstrating their achievements to their stakeholders). If this occurs, SANS actors should end up placing greater value on the data produced by the M&E system and, overtime, increasingly institutionalise the use of this data – creating sustained demand (Mackay, 2007; Hatry, 2012). In turn, this should strengthen the extent to which collecting data on behalf of the M&E system is perceived as a relevant and legitimate thing to do by these actors and increase the extent to which they perceive the participating in the M&E system as being a worthwhile exercise.

Enhancing the utility an M&E system has for SANS actors can be achieved through the following measures:

- adjusting the M&E framework to meet the information needs of SANS actors (measure 15)
- adding additional features to the M&E system (measure 16)

These measures are described and discussed below.

Measure 15: Adjust the M&E framework to meet the information needs of SANS actors

Adjusting the M&E framework to meet the information needs of SANS actors refers to the act of making changes to the indicators that are to be collected under the M&E system so that they are more useful to the SANS actors carrying out the data collection. These adjustments can be made through two broad approaches:

- First, lead agencies can adjust the indicators contained in the M&E system's M&E framework to better suit the information needs of SANS actors. Doing this can involve making small or large changes, ranging from making small adjustments to certain indicator definitions or collection protocols, to substituting indicators in favour of others that are deemed to be more useful.

- Second, as is proposed in measure 8, lead agencies can increase the amount of autonomy SANS actors have to design and collect their own indicators. SANS actors can be granted varying levels of autonomy with regards to the data they collect under an M&E system, ranging from none at all to total autonomy. Greater autonomy over the data they collect will allow SANS actors to collect data that is more relevant to their own information needs. However, providing greater flexibility in data collection will inevitably lead to data being collected under the M&E system being less standardised, posing challenges for data comparison and aggregation (see measure 8 for a more in-depth description of the pros and cons of increasing flexibility in data collection processes).

When exploring possibilities to enhance the utility of indicators for actors responsible for their collection, lead agencies should be cautious that the adjustments made do not significantly reduce the system's ability to perform its primary function – i.e., produce analysis that meets the informational needs of the policy-owners and other key end-users.

Good practice: Adjust M&E frameworks in close collaboration with the intended beneficiaries

Any adjustments made to the M&E framework should be made in close collaboration with the SANS actors expected to benefit from these adjustments. Involving these actors in this process should not only ensure that the adjustments adequately address their information needs, but also help realise

other benefits such as providing them with a sense of ownership over the system and building trust between them and the lead agency (Mackay, 2007).

Good practice: Provide SANS actors with training on how to interpret the data they are collecting

Lead agencies should consider whether SANS actors require training to enable them to interpret the data they are collecting and apply it in their decision-making. Such training should focus on providing them with (i) a thorough understanding of what M&E is and what its potential functions are, and (ii) the skills and knowledge required to use the monitoring data generated through M&E in a robust manner; this would include – amongst other things – teaching them how to understand trends, how to take indicator definitions into account when interpreting data, and how to manage common issues such as incomplete data or breaks in data time series (Mackay, 2007; Hatry, 2012).

Measure 16: Add additional features to the M&E system

Additional features of an M&E system refers to components of an M&E system that are not necessarily required for the collection, analysis and synthesis of data (hence "additional"), but instead can help SANS actors either (i) access information that is being generated elsewhere in the M&E system or (ii) better interpret the data they are collecting themselves.

While not necessarily exclusive, such features can include:

- **Additional knowledge products** that synthesize the information generated by the M&E system in a manner that is tailored to the information needs of targeted SANS actors.
- **Decision support tools** that allow SANS actors to interpret the data they are collecting in a manner that addresses an existing information need.
- **Knowledge-sharing platforms** that allow SANS actors participating in the M&E system to share knowledge, lessons and experiences related to implementing the policy being assessed by the M&E system.

These features are described in more detail below.

Additional knowledge products

Knowledge products are the final products that come from M&E systems following the collection, analysis and synthesis of data, they typically come in the form of reports, factsheets, and infographics. While all M&E systems will generate some form of knowledge product at the end of each M&E cycle, these products are typically tailored towards the needs of the system's key end-users (i.e., the policy-owners and other key high-level stakeholders). However, they will not necessarily be useful for the various SANS actors providing data to the M&E system.

Developing additional knowledge products that are designed to address the information needs of SANS actors represents a means of enabling these actors to tangibly benefit from the M&E system; something that will hopefully enhance their perception of the system and increase their motivation to participate in it. Furthermore, it can help to prevent SANS actors developing the impression that the data they are collecting on behalf of the M&E system is not being used for anything.

Decision support tools

Decision support tools are tools that support users to interpret data in a manner that enables them to make better decisions, faster.

In the context of an M&E system, a decision support tool developed for SANS actors would be one that enables them to process and analyse the raw data they are collecting on behalf of the M&E system and use it to support decision-making related to their own activities.

To be relevant for SANS actors, tools developed need to address a genuine information need. When they do this, SANS actors are likely to be more motivated to integrate the tool into their operations. Conversely, if the function performed by the decision support tool is not viewed as a priority by SANS actors, then it is unlikely that the tool will gain traction in the short- or long-term.

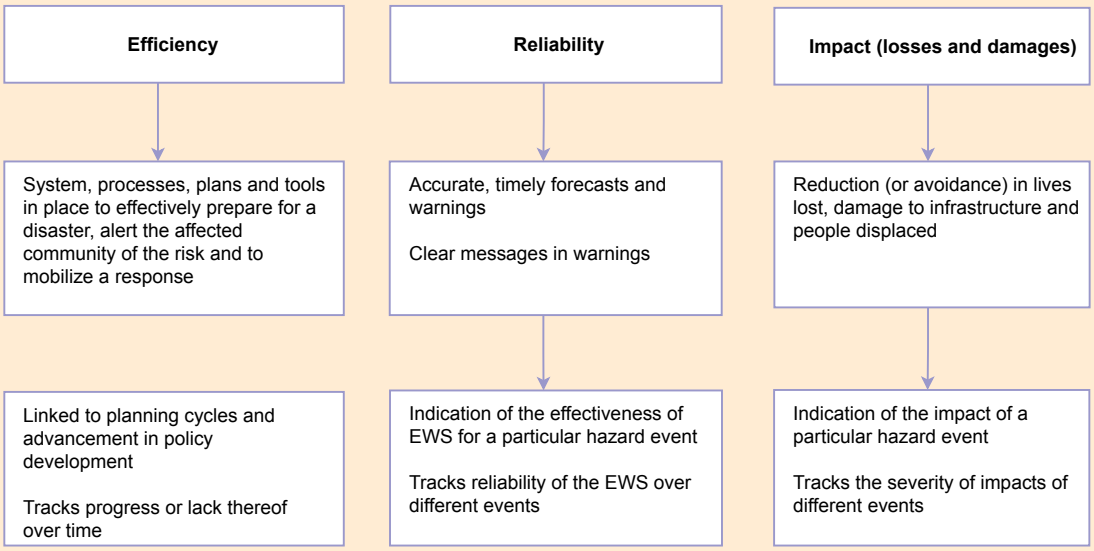
BOX 11

Experiences from ICAT projects: Developing decision support tools for municipal governments in South Africa

In partnership with the Department of Forestry, Fisheries and the Environment (DFFE) and the National Disaster Management Centre (NDMC), the Council for Scientific and Industrial Research (CSIR) have been developing an M&E system to monitor and evaluate the state of municipal Multi-Hazard Early Warning Systems (MH-EWS) in South Africa.

Prior to the project, the national government was only able to monitor one indicator related to municipal MH-EWS – which was whether municipal governments possess a MH-EWS. Using the World Meteorological Organisations (WMO – 2018) MH-EWS Checklist, CSIR developed an M&E framework that is able to assess the effectiveness of MH-EWS by collecting data on the efficiency, reliability and impact (see Figure 10).

Figure 10 Elements of effectiveness monitored by the M&E framework for monitoring and evaluating South Africa's municipal MH-EWS



Source: ICAT (2021)

To facilitate the collection of this data, CSIR have developed an Excel-based tool that serves as both a reporting template (i.e., data is reported using this template) and a decision-making support tool. By inputting the required data into the Excel-based tool, municipalities are generating an overview of whether all the necessary components are in place for the MH-EWS to function efficiently (efficiency), whether these components are functioning as they should (reliability), and whether this is leading to reductions in losses and damages caused by natural hazards (impact). Using this overview, municipal governments are able to identify where their MH-EWS is working effectively and where it could be improved. This information should support municipal decision-making related to the management and future development of their MH-EWS.

Box 11 presents an example of a decision support tool developed as part of a broader system developed to monitor and evaluate the state of municipal Multi-Hazard Early Warning Systems in South Africa.

Knowledge-sharing platforms

A knowledge-sharing platform is a platform that enables users to access, share, and exchange information, knowledge, and expertise with one another.

These platforms can take a number of forms, ranging from: online platforms where actors involved in the implementation of the policy can upload resources that provide information about their activities (e.g., factsheets, project reports); to periodic events where participants meet in-person or online to discuss their activities (e.g., provide updates about progress made, results achieved, lessons learned etc.).

In an M&E system, knowledge-sharing platforms can be used to facilitate the "horizontal" transfer of knowledge generated, lessons learned and good practices uncovered, concerning the implementation of the policy being monitored and evaluated (much of which will have been uncovered partially or wholly through M&E). Individual SANS actors can find this function useful as it allows them to learn from the experiences of others and apply these learnings to their own activities; something that should lead to better planning, implementation and outcomes.

Furthermore, in addition to their knowledge-sharing function, SANS actors can also find engaging in knowledge-sharing platforms useful as they provide opportunities for networking with other actors operating in their field. Networking opportunities can be highly valuable to many organisations as it often represents a route to establishing new collaborations, partnerships and funding for future

BOX 13

Experiences from ICAT projects: Knowledge-sharing amongst county-level actors through Kenya's county-level multistakeholder partnerships

In their Nationally Determined Contribution, Kenya has pledged to adopt a Climate Smart Agriculture (CSA) approach in its agriculture sector. To guide the implementation and adoption of CSA, the Ministry of Agriculture, Livestock, Fisheries and Cooperatives (MALFC) has developed the Kenya CSA Strategy 2017–2026 and Kenya CSA Implementation Framework 2018–2027.

In Kenya, jurisdiction over agriculture policy is devolved to the county level (the highest level of subnational administration in Kenya). To facilitate the implementation of the national CSA policy at the county-level, the MALFC is encouraging county governments to establish multistakeholder partnerships (MSP) in which relevant stakeholders to the policy – the county government, NGOs, CSOs, researchers, private sector actors, amongst others – come together to coordinate on the implementation of CSA in the county. The purpose of establishing these MSPs is to overcome problems with: (i) poor coordination between stakeholders implementing agriculture policies and (ii) the duplication and underreporting of activities and their achievements; that have constrained the implementation and M&E of previous policies.

The MSPs established at each county are intended to perform a range of functions in relation to the implementation of the CSA policy, including:

- facilitating coordination between stakeholders relating to the planning and implementation of CSA activities;
- facilitating the reporting on the implementation and results of CSA activities;
- facilitating the sharing of knowledge related to CSA (e.g., good practices, lessons learned, experiences);
- facilitating networking between stakeholders operating in the county, and;
- facilitating stakeholder consultations related to county CSA policy.

For the MALFC and their county-level counterparts, establishing MSPs at the county-level has – amongst other things – provided them with institutional arrangements for tracking the CSA-related actions of non-state actors within their jurisdictions.

The opportunity to gain visibility and showcase what they are doing to county- and national-level governments through the MSP's reporting function is valued by some county-level stakeholders. However, for many of the county-level stakeholders, the opportunity to report to the county- and national government is not the primary motivation for participating in the MSP. In fact, much of the appeal of participating in an MSP lies in their potential to make achieving their goals in relation to CSA easier. For example, some stakeholders report that knowledge shared by others through the MSP has been useful in supporting their own activities. Meanwhile, others have found that the MSP's networking function has been useful for establishing partnerships and collaborations, and securing finance for future activities.

5.2.3 Additional incentives for participating in the M&E system

In addition to the broad measures described above, lead agencies can further motivate SANS actors to participate in the M&E system by putting in place additional incentives for them to do so.

Measure 17: Establish positive and negative incentives for participating in the M&E system

Lead agencies can utilise incentives as standalone measures to provide SANS actors with an additional layer of encouragement to fulfil their responsibilities under the M&E system. When used appropriately, they can represent an effective – and sometimes low cost – means of providing SANS actors with the additional motivation to go beyond meeting the minimum requirements and collect and report high quality data in a timely manner. Additionally, incentives can also be used to nudge SANS actors into using the data they are collecting under the M&E system to support their own decision-making. As discussed in section 5.2.2, achieving this can lead to SANS actors developing an appreciation of the value of monitoring data as an input to effective decision-making and hopefully lead to them integrating it into their internal processes. Incentives can be both positive and negative. Positive incentives work by offering organisations rewards for fulfilling (or exceeding) their responsibilities. Negative incentives threaten to penalise organisations for failing to fulfil their responsibilities. To create the desired leverage, incentives should be based around something of value to the actors targeted. Potential options can range from being based around abstract things such as reputation (which can be bolstered or diminished through public acknowledgement or criticism), to things with more tangible value such as finance and decision-making powers.

Table 3 provides a list of positive and negative incentives that can be established by lead agencies to encourage or pressure SANS actors into participating in the M&E system in the desired way. However, not all the incentives identified in this table will be applicable in all situations. Therefore, descriptions of their likely applicability are provided in the right column of the table.

Positive incentives	
Incentive	**Applicable situations**
Praising the efforts of individual SANS actors when providing them with feedback to the data they have delivered.	Broadly applicable in most situations.
Recognising the achievements of individual SANS actors (e.g., good M&E practices implemented, delivery of high-quality data) by name-checking them in communications sent to actors involved in operationalising the M&E system (e.g., newsletters and other communications material, townhall meetings etc.).	Broadly applicable in most situations.
Reward individual SANS actors who deliver high-quality data with awards and prizes.	Broadly applicable in most situations.
Reward SANS actors who fulfil their responsibilities under the M&E system with operational benefits related to the policy being monitored and evaluated (e.g., increased budget allocation for its implementation, or increased decision-making autonomy to manage its implementation).	Only applicable when policy-owners are financing the adaptation activities being monitored and evaluated.
Establish a certification scheme that provides actors who can document achieving certain levels of impact through their adaptation activities with official certification (see Box 14).	Only applicable when SANS actors are funding the implementation of adaptation activities using their own resources and are interested in certification to demonstrate their achievements to their stakeholders (e.g., as part of their Corporate Social Responsibility [CSR] efforts).
Reward SANS actors with operational benefits when they meet their performance targets for the policy.[6]	Only applicable when policy-owners are financing the adaptation activities being monitored and evaluated.
Negative incentives	
Criticise poor quality data and M&E practices when providing individual SANS actors with feedback to the data they have delivered.	Broadly applicable in most situations.
Highlight SANS actors who either deliver poor quality data or fail to deliver data at all, in communications sent to actors involved in operationalising the M&E system (e.g., newsletters and other communications material, townhall meetings etc.).	Broadly applicable in most situations.
Withhold funding from, or reduce decision-making autonomy of, SANS actors that conduct poor quality M&E or fail to conduct M&E at all.	Only applicable when policy-owners are financing the adaptation activities being monitored and evaluated.

Source: Adapted from Mackay (2007)

[6] Establishing this correlation between good performance and decision-making autonomy and budgets should incentivise SANS actors to undertake M&E by making performance data a prerequisite to being able to receive these benefits, thereby giving it a tangible value from the SANS actor's perspective.

BOX 14

Experiences from ICAT projects: Establishing adaptation-related certification schemes

Certification schemes can be used by lead agencies to encourage SANS actors to provide them with data about activities that they are implementing by offering them "official" certification that they have implemented these actions or achieved a certain level of impact. Certification by a recognised scheme often has value to recipients as it can be used in communications with stakeholders to demonstrate what they are doing and improve their reputation.

This incentive has been used with some success to incentivize SANS actors (e.g., cities, businesses and NGOs) to collect and report on data relating to GHG emissions reductions that they have achieved through implementing mitigation actions. Replicating this for adaptation purposes however, is often more difficult as positive messaging surrounding adaptation can be complex, reducing its potential as a source of positive publicity; and therefore its appeal as an incentive (Schaer et al., 2019).

In cases where messaging around adaptation is clearer however, certification schemes can be used to good effect. For example, in the Dominican Republic, coastal hotels are incentivised to collect data related to climate-resilience enhancing activities such as coral reef and mangrove restoration to obtain certification that they have done so through recognised certification schemes. This is valuable to hotels as it allows them to brand themselves as active in the climate action space to their clientele, giving them a potential competitive advantage.

These certification schemes are independent from the M&E system being developed to monitor adaptation measures being implemented in the agriculture and tourism sectors of the Dominican Republic (previously referred to in Box 7). However, the system is able to benefit from these schemes as hotels implementing climate-resilience enhancing activities that are certifiable under these schemes are able to report on these activities to the M&E system at relatively little additional cost. Thereby making the barrier to participating in the M&E system much lower than it would be if they needed to collect new data.

5.2.4 Raising awareness of the M&E system and its benefits

Introduction

Lead agencies can raise the awareness of the M&E system and its benefits amongst SANS actors expected to provide data to the system by engaging them through communication and advocacy (C&A) activities.

Unlike other approaches to enhancing motivation for participating in an M&E system, C&A activities do not create push or pull factors. Instead, they can be used to communicate information about the M&E system to SANS actors, raise awareness of the system amongst those expected to provide data to it and ensure that these actors understand the system, its objectives, and the reasons why they should participate in it.

Ensuring that SANS actors understand the M&E system and are aware of its benefits is vitally important for motivating them to participate in the system. As if they have a poor understanding of the M&E system – or are largely unaware or unconvinced of the benefits it is intended to deliver – they are unlikely to perceive the system as a useful or worthwhile endeavour; regardless of how beneficial it could be in practice.

C&A activities are particularly important in the initial stages of developing the M&E system, when relevant SANS actors are either unlikely to aware of its existence or are unlikely to be well-briefed about what it aims to achieve and how it may benefit their organisation. In fact, even when SANS actors are formally engaged in the M&E system, there is no guarantee that they will be aware of the system's full value. As such, C&A should be continuous throughout the lifespan of an M&E system.

Measure 18: Undertake communication and advocacy activities

C&A activities are generally based around utilising simple and well-known formats for engaging stakeholders. These include both interactive formats where audiences are actively engaged in a one-off event (e.g., meetings, presentations, webinars, seminars etc.) and inactive formats such as the production of communication materials that can be shared with, or accessed online by, interested parties (e.g., fact sheets, exploratory videos, dedicated websites).

Successful communication and advocacy

While vehicles for C&A activities are generally basic, successfully raising the awareness of SANS actors is reliant on C&A activities reaching the right people and being used to communicate the correct messages.

Effective messaging

Effective messaging will make the M&E system being developed real, relevant and valuable to the actors they are addressing. To achieve this, key messages conveyed during C&A activities need to be focussed on the needs and perspectives of the actor being addressed, answering key questions that are of importance to them, for example:

"How will the M&E system being developed help actors do their jobs better and achieve their organisational goals?"

Providing satisfactory answers to questions that are important to SANS actors is more likely to convince them that the M&E system is useful and worthwhile endeavour and is therefore more likely to contribute to them becoming motivated to participating in the system.

While C&A activities represent an opportunity to advocate the benefits of the M&E system being developed however, they also represent an important opportunity to calm any reservations that SANS actors may have about how the data they provide to the system will be used. There is a risk that individuals working within certain organisations may be naturally hostile towards the prospect of an M&E system as they believe they may be held accountable if the activities they are in charge of are not delivering the expected results. Managers are particularly likely to feel vulnerable to misuse of M&E data in this manner, especially if they believe that they have not been provided with adequate resources to ensure that the expected outcomes are achieved (Mackay, 2007; Lahey, 2015).

BOX 15

Key information that should be conveyed during communications and advocacy activities

The following information should be conveyed to SANS actors during communications and advocacy activities for the M&E system:

- The purpose of the M&E system
- Its basis in the country's legal / policy framework
- Why it is important that the M&E system is developed
- The tangible benefits it will be able to deliver for them (e.g., will it support their decision-making)
- How information will be used by the system's end-users
- How information will not be used by the system's end-users (e.g., it will not be used as the basis for allocating blame)
- What resources will be required to participate in the M&E system (e.g., human resources, expertise, equipment and finance)
- What financial and capacity building support will be provided to support their participation in the M&E system

Reaching the right individuals

Ensuring that C&A activities are able to reach the right individuals within an organisation is critical for their success. Which people represent the correct people will vary in any given scenario, ultimately depending on the messages one wants to convey. It is important however, that at least some of the C&A activities engage individuals in relevant management positions. Due to their ability to influence the priorities of and set the agenda within their organisations, if convinced of the importance of participating in the M&E system, these individuals will be able to act as "champions" for

the system, ensuring that data collection activities are properly financed and applying pressure on technical staff to ensure that the required data is collected properly and reported in a timely manner.

Good practice: Developing communication and advocacy strategies

To ensure that C&A activities are as effective as possible, lead agencies should consider developing a C&A strategy prior to embarking on these activities. Doing so should allow lead agencies to ensure that the correct messages conveyed to the correct people across all C&A activities, and that the different activities planned are coordinated, appropriate, and adequate given the outcomes anticipated from these C&A activities. Box 15 presents six important steps to developing an effective C&A strategy.

BOX 16

Steps for developing a C&A strategy

These steps follow a results-based approach to M&E-related communications and advocacy. They start with understanding the challenges that one wants to overcome through C&A and defining objectives for C&A activities. Following this, one needs to decide on the target audiences for C&A efforts and what messages need to be relayed to them regarding the M&E system being developed.

1. Identify and rank the challenges one wants to overcome with your communications and advocacy activities (e.g., actors being unaware about the benefits that the M&E system can deliver them or being resistant to the development of the M&E system).
2. Identify the target audiences that you wish to reach, including the specific individuals within relevant organisations.
3. Develop key messages to be conveyed during C&A activities.
4. Select appropriate approaches and channels for C&A activities (in this step, lead agencies should consider if synergies with other activities can be exploited – see below).
5. Design communications and advocacy material.
6. Develop a C&A work plan and ensure sufficient budget is set aside for C&A activities.

Source; Adapted from Görgens and Kusek (2009)

Good practice: Utilising existing platforms for communication and advocacy activities

Organising C&A activities can be time-consuming and costly for lead agencies, with significant resources often being required to just identify the "right individuals", let alone organise the activities (e.g., meetings, webinars) required to actually engage them.

To minimise costs associated with C&A activities, lead agencies should try to identify existing platforms, networks or events that provide them with ready access to actors required to report to the M&E system.

In some cases, actors implementing the policy being monitored and evaluated will be organised into active stakeholder platforms (as is the case in ICAT's project in Kenya – see Box 13). When these platforms exist, lead agencies can utilise their communications channels (e.g., periodic meetings, events) to engage multiple actors that are actively involved in implementing the policy (and will therefore be expected to report data to the M&E system).

Another option is to tap into any domestic networks, forums, conferences, and workshops that are relevant to both the policy area that the policy falls under and the actor groups that are likely to be implementing the policy. Hosting or participating in events such as webinars, presentations and meetings on these platforms can represent an effective and low-cost means of gaining access too not only actors involved in the implementation of the policy being monitored and evaluated, but also individuals from these organisations who are actively working in this policy area (see Box 17).

BOX 17

Experiences from ICAT projects: Utilising pre-existing platforms for C&A activities

During the process of developing M&E systems for M&E of municipal multi-hazard early warning systems (see Box 11) and loss and damage caused by extreme weather events (see Box 7) on behalf of the South African Department of Environment, Forestry and Fisheries (DEFF); the Council for Scientific and Industrial Research (CSIR) attended a series of forums focussing on Disaster Risk Management (DRM) to communicate and advocate for the M&E systems they were developing.

These forums were chosen for C&A activities as a segment of the actors participating in these forums will be expected to collect and report data to the M&E systems being developed and are expected to benefit from the decision-support tools being developed as part of, and the knowledge products being produced by, the M&E system. Their engagement in these forums was facilitated by the DEFF who are regularly invited to these forums.

By making presentations at events hosted by these forums, CSIR were able to engage highly relevant managers and technical specialists from subnational governments and provincial disaster management centres to raise their awareness about the M&E systems they were developing, explain what the systems are intended to achieve, and advocate for their uptake by municipal governments.

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Annex I

Descriptions of different formats of guidance and training

Annex 1. Descriptions of different formats of guidance and training

Table 1.A below provides descriptions of the generic formats of guidance and training presented in the main document.

Example format	Description	Implementers
Information sheets	Information sheets are short written documents that provides clear step-by-step instructions on how to perform specific tasks. Ideally, these documents would be short, sharp, user-friendly, and targeted to its intended audience. Information sheets would generally be appropriate when target audiences have a limited number of tasks that are relatively simple and straight-forward for them to implement (i.e., implementing these tasks does not require the learning of new knowledge or skills).	**Lead agencies**
Instruction manuals	A more comprehensive written document that provides clear step-by-step instructions on how to perform a wide range of tasks. Instruction manuals are generally much longer than information sheets and can be used to provide readers with more detailed information, including important background knowledge required to adequately carry out their tasks (e.g., information about climate change impacts). Instruction manuals would be appropriate when the target audience have a larger number of tasks to implement and/or the tasks allocated to them require them to have a basic level of knowledge or possess basic skills (i.e., knowledge and skills that can be adequately taught through written communication).	**Lead agencies**
Online courses	Online courses are hosted on an online platform. They facilitate distance-learning and can be accessed at any time by the target audience. Through a mix of mediums (e.g., written content, audio recordings, videos and interactive exercises), these courses can be used to provide users with step-by-step guidance on how to conduct certain tasks and knowledge and skills relevant to being able to implement the M&E system. The course is often organised into modules which, at the end, require users to complete an exam to pass. The disadvantage of this format is that there is no teacher–student interaction that one would get in training events and courses. This means that users cannot obtain any information that is not already in the course's curriculum, which – in cases where the curriculum does not address all of the user's information needs– can mean users can finish these courses with knowledge gaps. In light of this limitation, online courses can be inadequate for teaching users to undertake complicated processes and/or providing them with more specialist skills (e.g., using specialist software or applying complex methodologies) that require a certain level of teacher–student interaction to impart. The advantage of this format, however, is that users can access the content at any time and choose to revisit aspects that are most relevant to them. Further, the fact that they do not require staff from lead agencies or consultants to orchestrate will greatly reducing the costs of operating such a course (particularly when the course will be provided to many individuals). These courses can be relatively costly to set up however, and may require external consultants to be hired (both software specialists to build the platform and education specialists to design the course's curriculum and structure).	**Lead agencies and/or specialist providers**
Training events and courses	Training events and courses can take a number of guises, including seminars/webinars,[7] training workshops, and short training courses (e.g., courses that are over one day but not representing a full-time commitment over several months); all of which can be conducted in-person or online. These events or courses can be used to walk attendees through certain processes and teach them new knowledge and skills relevant to being able to implement the M&E system. While more expensive to run than preprepared online courses, the advantage of training events and short courses is that they provide participants with access to the specialists presenting/facilitating the course, allowing them to ask questions and steer discussions towards the topics that the participants themselves identify as difficult to grasp and/or important for them to do their work. As such, this format may be more appropriate for when attendees are required to learn how to undertake more complicated processes or specialist skills that are more difficult to learn without student–teacher interaction.	**Lead agencies and/or specialist providers**

[7] Technical webinars should not be confused with webinars that are communication/advocacy-orientated (i.e., aimed to inform stakeholders – including SANS actors – about the M&E system).