M&E systems to track adaptation outcomes are a crucial element of the National Adaptation Plan (NAP) process. However, these systems are often complex to design and implement. Challenges include measuring results amid uncertainty, limited baseline information and data availability, and multiple scales of interventions, among others. Kenya is working to overcome these challenges by using a phased approach to develop and implement a doable and effective adaptation M&E system.

**Climate Change Policy Context: Kenya**

Kenya has demonstrated a strong commitment to addressing climate change challenges. *The Climate Change Act, 2016*, the first legislation in Africa dedicated to climate change, sets out the legal basis for mainstreaming climate change considerations and actions into sector functions. Section 3 requires that the national and country governments, among other things, “build resilience and enhance adaptive capacity to the impacts of climate change” (Section 3.2(b), p. 183).
The National Climate Change Framework Policy (2018) promotes a low-carbon, climate-resilient pathway and aims to enhance adaptive capacity and build resilience to climate variability and change. The policy adopts a mainstreaming approach to ensure the integration of climate change considerations into planning, budgeting and implementation at all levels of government (Government of Kenya, 2018a). The National Climate Finance Policy (2018) establishes the institutional and reporting frameworks to access and manage climate finance (Government of Kenya, 2018b).

**Priority Adaptation Actions**

The Climate Change Act, 2016 requires the development of a National Climate Change Action Plan (NCCAP) every five years that sets out measures and mechanisms to guide the country toward the achievement of low-carbon, climate-resilient development (Section 13). NCCAP 2018–2022 prioritizes adaptation and sets out seven climate change priorities (listed in Table 1). The actions support the government’s Big Four Agenda for 2018–22, recognizing that climate change is likely to limit the achievement of the four pillars of Food Security, Affordable Housing, Manufacturing and Universal Health Coverage (Executive Office of the President, Republic of Kenya, 2018).

Table 1. Priority climate change actions in Kenya’s NCCAP 2018–2022

<table>
<thead>
<tr>
<th>Priorities</th>
<th>Objectives</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Disaster Risk (Floods and Drought) Management</td>
<td>Reduce risks that result from climate-related disasters, such as droughts and floods.</td>
</tr>
<tr>
<td>2. Food and Nutrition Security</td>
<td>Increase food security and nutrition through enhanced productivity and resilience of agricultural systems in as low-carbon a manner as possible.</td>
</tr>
<tr>
<td>3. Water and the Blue Economy</td>
<td>Enhance resilience of the water sector by ensuring access to and efficient use of water for agriculture, manufacturing, domestic, wildlife and other uses.</td>
</tr>
<tr>
<td>4. Forestry, Wildlife and Tourism</td>
<td>Increase forest cover to 10 per cent of total land area; rehabilitate degraded lands, including rangelands; increase the resilience of the wildlife and tourism sectors.</td>
</tr>
<tr>
<td>5. Health, Sanitation and Human Settlements</td>
<td>Reduce incidences of malaria and other diseases projected to increase because of climate change; promote climate-resilient buildings and settlements, including urban centres, arid and semi-arid lands and coastal areas; and encourage climate-resilient solid waste management.</td>
</tr>
<tr>
<td>6. Manufacturing</td>
<td>Improve energy and resource efficiency in the manufacturing sector.</td>
</tr>
<tr>
<td>7. Energy and Transport</td>
<td>Climate-proof energy and transport infrastructure; promote renewable energy development; increase uptake of clean cooking solutions; and develop sustainable transport systems.</td>
</tr>
</tbody>
</table>

Source: Government of Kenya, in press (a), section 3.2.
NCCAP 2018–2022 sets out priority actions to deliver on the Kenya National Adaptation Plan 2015–2030 (NAP) for the five-year period. The NAP establishes high-level adaptation actions in 20 planning sectors over a 15-year time frame and provides guidance to national and country governments on priority actions in the short, medium and long terms (Government of Kenya, 2016). NAP sectors and actions are aligned with the adaptation priorities in Kenya’s Nationally Determined Contribution (NDC), which establishes adaptation as Kenya’s priority response to climate change. The NDC sets a goal of mainstreaming adaptation actions in the five-year development plans of Kenya Vision 2030 and implementing these actions (Government of Kenya, 2015). NCCAP 2018–2022 is the five-year implementation plan for Kenya’s NAP and adaptation NDC.

The priority adaptation actions in NCCAP 2018–2022 were informed by the second Adaptation Technical Analysis Report (ATAR) 2018–2022, which is a companion document to and provides technical analysis for NCCAP 2018–2022 (Government of Kenya, in press [b]).

**Principles Guiding the Development of Kenya’s Adaptation M&E System**

Kenya’s adaptation M&E system is under development, building on the requirements of the Climate Change Act, 2016; the guidance provided in the NCCAP 2018–2022; the learning generated through the development of Kenya’s NAP; input from stakeholder consultations (see Box 1) and a validation workshop; and the measurement, reporting and verification framework plus (MRV+) system put forward in the first NCCAP (2013–2017). The MRV+ system was defined as “an integrated framework for measuring, monitoring, evaluating, verifying and reporting results of mitigation actions, adaptation actions and the synergies between them” (Government of Kenya, 2013, p. 129). Progress on the proposed MRV+ system was limited because it was complex, human-resource intensive and costly, though the first NCCAP and NAP process did help to identify indicators to track progress on adaptation (Murphy & Chirchir, 2017).

**Key Challenges and Opportunities**

The consultation process led to the understanding that the main challenge is not a lack of data but how to operationalize data access, synthesis and reporting. The Monitoring and Evaluation Department (MED) of the State Department for Planning and Statistics operationalizes the national M&E framework at national, sector, county and community levels. Various governance structures are being established to ensure effective and efficient M&E to enable county, national, regional and international reporting as well as national and county planning. This framework also facilitates tracking and reporting for the medium-term plans and provides feedback for public expenditure reviews and annual progress reports. It is an opportunity for the
adaptation M&E framework and reporting to be developed within this broader framework. Already, MED has started the process of selecting climate change indicators and developing a module on climate change for the online M&E platform. This collaboration may be built on to operationalize the adaptation M&E.

Further, the Kenya National Bureau of Statistics (KNBS), under the Environment and Food Security Section, is mandated to collect data from both the public and private sectors and hence provides an opportunity to address data access. Various data portals have been established, such as under the Open Data Initiative, through which the government is committed to collecting data and availing it. The KNBS, as a mandated repository, is working on environmental statistics and establishing the framework for collecting data for relevant SDGs.

Based on these opportunities, Kenya will seek to:

1. **Develop a simple, integrated and multilevel M&E system for adaptation** – The system will be aligned to the national M&E systems and data collection through MED and KNBS and hence should not be a burden to the national and county government institutions that will be involved in adaptation M&E. The M&E system should be doable and undertaken with available human, technical and financial resources.

2. **Ensure the M&E system is sufficiently flexible to enable compliance with domestic and international regulations** – Under the Paris Agreement, Kenya is expected to submit an adaptation communication to the United Nations Framework Convention on Climate Change that includes information related to climate change impacts, vulnerabilities and adaptation. Domestically, the cabinet secretary responsible for climate change affairs is required to report biannually to parliament on the status of implementation of international and national obligations to respond to climate change and progress toward attainment of low-carbon, climate-resilient development. The National Climate Change Council, chaired by the president of the Republic of Kenya, is required to prepare an annual report on the implementation of climate change action plans, including progress on the achievement of objectives (Government of Kenya, 2016a, Sections 8 and 34).

3. **Develop the adaptation M&E system in a phased approach** – The M&E system will be developed in a phased approach over 2018–2022, with an emphasis on priority sectors and the identification of measurable actions to provide focus and direction. The key action is to “establish the monitoring and evaluation (M&E) component of the MRV+ system to report on adaptation actions and benefits, including identification and measurement of adaptation indicators (including collection of baseline information and development of gender-disaggregated data and gender indicators)” (Government of Kenya, 2019b, Section 4.1.5).

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**Box 1. Recommendations: Stakeholder Workshop on Kenya’s M&E of Adaptation**

Stakeholders at a workshop on Kenya’s M&E system in April 2018 called for a simple, integrated and multilevel M&E framework for adaptation. The M&E system should provide information on the goal of the ATAR to “strengthen resilience and adaptive capacity to climate-related hazards and natural disasters,” which is derived from Sustainable Development Goal (SDG) 13.1 (SDG Knowledge Platform, n.d.). A universal indicator to assess progress toward the ATAR outcome could be an increase in the number of people able to better cope with the impacts of climate change. This indicator could be measured by the number of people and systems benefitting from various adaptation actions supported under NCCAP 2018–2022.

The stakeholder meeting recommended that the proposed purpose of Kenya’s adaptation M&E system be to:

- Track and report on the implementation of climate change adaptation actions
- Provide guidance on climate change response actions
- Help Kenya fulfill international reporting requirements
- Demonstrate the country’s climate finance readiness and provide a platform for attracting climate finance flows.

*Source: Climate and Energy Advisory Ltd., 2018.*
4. **Use the M&E system to demonstrate that climate change adaptation actions deliver results** – The NCCAP 2018–2022 noted that reporting to the National Climate Change Council needs to demonstrate that climate change action and spending on climate change leads to real results. For adaptation M&E, this means “assessing if adaptation actions have increased climate resilience and if people are better able to cope with climate change” (Government of Kenya, in press (a), Section 4.1.5).

**Moving Forward to Develop Kenya’s M&E System**

The Government of Kenya intends to use a phased approach to develop its adaptation M&E system. The first steps will establish a simple, cost-effective M&E system, with subsequent steps allowing the system to grow in complexity and reach over time. The next steps are described below.

1. **Establish governance and coordination mechanisms for adaptation M&E**

The Climate Change Directorate is mandated by The Climate Change Act, 2016 to coordinate all climate change actions, including developing internal systems for the MRV+ system that includes M&E processes for adaptation. The Climate Change Directorate is supported in the coordination of adaptation issues by a multistakeholder, cross-sectoral National Adaptation Coordination Committee that also acts as the Adaptation Technical Working Group for the NCCAP process. The committee advises on adaptation actions; provides oversight, direction and guidance on adaptation issues; reviews the achievements of the NCCAP and NAP; and assesses the level of mainstreaming of adaptation issues in sector and county plans. A first step is to clarify the M&E function of the National Adaptation Coordination Committee and to ensure that interdepartmental agreements are in place to enable officials to participate on the committee in a meaningful way.

**2. Identify measurable adaptation indicators and harmonize with existing M&E processes**

NCCAP 2018–2022 identifies priority actions and expected results by June 30, 2023 in seven priority areas. The seven priority areas include national-level SDG indicators that can be measured in Kenya with available data or data that can be produced with minimum effort in one to two years (Sustainable Development Goals Knowledge Platform, 2017). These SDG indicators have been identified as useful for monitoring NCCAP 2018–2022 adaptation actions. Some of these likely can be proxy indicators for adaptation achievements, in that they can provide an indication of the progress made in achieving increased resilience to climate change but likely will not provide an accurate measurement of actual resilience improvements (Christiansen, Schaer, Larsen, & Naswa, 2016, p. 11). Tracking these indicators against climate variability is expected to provide information for the M&E of adaptation. Alignment of the climate priority indicators with national indicators, as defined in the Third Medium-Term Plan Indicators Handbook under development by the National Treasury and Ministry of Planning, will be essential.

A first phase of work is to develop an agreement with the National Treasury and Ministry of Planning to define the baseline data and M&E results for the national-level indicators included in NCCAP 2018–2022 and to use this information to track progress on adaptation.
The next step is to finalize the sector-specific M&E frameworks to measure adaptation outcomes. The Climate Change Directorate will work with the climate change units in sector ministries to use the expected results set out for each of the seven climate priorities to guide the identification of appropriate adaptation indicators. This will include identifying indicators with available baseline data for 2018, indicators requiring the collection of data, and sources of information and data. Many indicators selected by sectors lack baseline information, and the mechanisms for data collection have not been well defined.

<table>
<thead>
<tr>
<th>Priorities</th>
<th>National-Level Indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Disaster Risk (Floods and Drought) Management</td>
<td>• Number of deaths, missing persons and directly affected persons attributed to disasters per 100,000 population.</td>
</tr>
<tr>
<td></td>
<td>• Proportion of local governments that adopt and implement local disaster risk reduction strategies in line with national strategies.</td>
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<tr>
<td></td>
<td>• Number of households receiving food aid and cash transfers.</td>
</tr>
<tr>
<td>2. Food and Nutrition Security</td>
<td>• GDP growth of the agricultural sector</td>
</tr>
<tr>
<td></td>
<td>• Livestock deaths from drought/number slaughtered attributable to drought</td>
</tr>
<tr>
<td></td>
<td>• Agricultural land under irrigation (acreage)</td>
</tr>
<tr>
<td>3. Water and the Blue Economy</td>
<td>• Water storage per capita</td>
</tr>
<tr>
<td></td>
<td>• Water coverage</td>
</tr>
<tr>
<td></td>
<td>• Per capita water availability</td>
</tr>
<tr>
<td></td>
<td>• Coverage of protected areas in relation to land and marine area</td>
</tr>
<tr>
<td>4. Forestry, Wildlife and Tourism</td>
<td>• Forest cover as a percentage of total land area</td>
</tr>
<tr>
<td></td>
<td>• Proportion of land that is degraded as a percentage of total land area</td>
</tr>
<tr>
<td></td>
<td>• Elephant deaths as a result of drought</td>
</tr>
<tr>
<td>5. Health, Sanitation and Human Settlements</td>
<td>• Malaria incidence per 1,000 population</td>
</tr>
<tr>
<td></td>
<td>• Percentage of urban solid waste regulated, collected and well managed</td>
</tr>
<tr>
<td>6. Manufacturing</td>
<td>• Number of industrial parks adopting waste-diversion practices</td>
</tr>
<tr>
<td>7. Energy and Transport</td>
<td>• N/A</td>
</tr>
</tbody>
</table>

3. Establish guidelines and build capacity for adaptation reporting

Guidelines for adaptation reporting need to be established for sectoral ministries and county governments. This reporting will be primarily undertaken by climate change units established in national government entities and county governments as a requirement of The Climate Change Act, 2016. The Climate Change Directorate will work with a select number of national government entities that are most involved in adaptation actions or whose programs are essential for delivery of the Big Four Agenda, such as the ministries of agriculture, environment and forestry, and health, and the National Drought Management Authority. Capacity building for climate change units is required to enhance M&E of adaptation and reporting at the sector level.

Source: Government of Kenya, in press (a), Section 3.
Over time, as lessons are learned, the reporting requirements will be expanded to all national public entities and county governments.

4. Build on established adaptation M&E systems at the county level

Some county governments have piloted county-level adaptation M&E systems using the Tracking Adaptation and Monitoring Development (TAMD) approach (Karani, Kariuki, & Osman, 2014). At least five county governments have established county climate change funds, and many carry out M&E as a requirement of fund regulations and development partner support. There is an ongoing effort to develop county-level indicators through UN Development and MED.

The key steps for identifying county-level indicators are illustrated in Figure 1.

5. Consider linking the adaptation M&E system with national and county M&E systems

The Climate Change Directorate will link the climate change MRV+ system with the National Integrated Monitoring and Evaluation System (NIMES) through MED, who are responsible for national and county M&E, indicator development and data collection; M&E policy coordination and capacity building; dissemination, advocacy and sensitization; research and results analysis; and project M&E. The MED of the National Treasury and Ministry of Planning is in the process of expanding the scope of NIMES, including the development of an electronic dashboard to help the government access timely and regular information for evidence-based decision making to achieve Kenya Vision 2030 and the SDGs.

The integration with NIMES will reduce the need for some formal arrangements and complex governance systems for adaptation M&E. This integration will build on the collaboration between the MED and the Climate Change Directorate to develop the indicators handbook and could facilitate access to information to track the national-level indicators for the seven priority actions in NCCAP 2018–2022. Linkages with NIMES potentially will simplify the M&E system, facilitate its operationalization and raise climate change adaptation monitoring to the highest national level. Further, this will strengthen reporting of adaptation actions in the SDG and national reporting frameworks, including reporting on the Big Four, and could support dissemination efforts.

Finally, the County Integrated Monitoring and Evaluation Systems (CIMES) that are being established will enable county governments to measure progress on projects, programs and the use of resources on climate change adaptation. Many of these systems are at an early stage of development, and the learning from working with NIMES could offer valuable lessons in linking with 47 county M&E systems.

These linkages between MRV+, the Climate Change Units (CCUs) and the NIMES/CIMES are illustrated in Figure 2.

Figure 1. The key steps for defining county-level indicators once priority actions are agreed

Note: CCD = Climate Change Directorate; COG = Council of County Governors; NIMES = National Integrated Monitoring and Evaluation System; CIMES = County Integrated Monitoring and Evaluation System.

Figure 2. Structure of the MRV+/M&E system in the short and the long terms
References


About the NAP Global Network and sNAPshots series

The NAP Global Network is a group of individuals and institutions who are coming together to enhance bilateral support for the NAP process in developing countries. Based on experiences and lessons shared through the activities of the NAP Global Network, sNAPshots highlight examples of how countries are currently approaching different aspects of the NAP process. If interested in participating the NAP Global Network, please sign up online.

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