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# Tracking Adaptation and Measuring Development (TAMD) in Ghana, Kenya, Mozambique, Nepal, Pakistan

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Meta-analysis findings from Appraisal and  
Design phase

## Contents

<b>EXECUTIVE SUMMARY</b>	<b>2</b>
<b>INTRODUCTION</b>	<b>4</b>
Approach	4
<b>BUILDING BLOCKS FOR CLIMATE RISK MANAGEMENT IN TAMD COUNTRIES</b>	<b>5</b>
Information services	5
Policy and planning – policy and institutional frameworks	6
Existing building blocks--Implications for applying the TAMD approach	7
<b>MONITORING AND EVALUATION SYSTEMS</b>	<b>8</b>
M&E Systems for measuring socio economic parameters	8
M&E Systems for Climate Change Adaptation	9
Existing M&E systems---Implications for applying the TAMD approach	10

## EXECUTIVE SUMMARY

The aim of this paper is to summarise findings from appraisal of M&E systems across five TAMD countries - Ghana, Kenya, Mozambique, Nepal, and Pakistan. The findings describe the national monitoring and evaluation systems of participating countries, as well as corresponding policies, information services and institutional frameworks for addressing climate risks. This cross-country assessment explains the potential for implementation of the Tracking Adaptation and Monitoring Development (TAMD) approach based on an analysis of the building blocks and the M&E systems that exist in the country at the time when TAMD was introduced.

### Building Blocks for mainstreaming climate resilience

National M&E systems for climate change are reliant on the building blocks for mainstreaming climate resilience within each country. These building blocks, which include policies, institutional frameworks, and information services, support climate change efforts and guide the operationalization of M&E systems used to assess their performance-

**Information services-** All participating TAMD countries have a central agency for information management and some also have a central portal or an information system for socio-economic data management (Ghana, Kenya). Information systems for climate change information are less advanced, but are beginning to evolve in countries where national climate change strategies were recently developed (Kenya, Mozambique, and Nepal).

Several challenges make the existing systems less effective at measuring climate change related indicators. Observed challenges include the scattered information across ministries, lack of information sharing between ministries, project by project information management, inadequate analysis of climate-related data, and a lack of continuous coverage of climate related information.

**Policy frameworks-** Climate resilience objectives are reflected in policy documents, actions plans, or national strategies of all TAMD countries, but no country had passed any climate change legislation. Policy frameworks have evolved from National Adaptation Programmes of Action (NAPA) type projectised arrangements to become national climate change policies/ strategies (Nepal, Mozambique). Some countries have also developed action plans and planning frameworks to operationalize the strategies (Kenya, Ghana), while others are embryonic in their efforts for addressing climate risks (Pakistan).

**Institutional frameworks-** The institutional arrangements for climate change planning differ across TAMD countries. Nepal has experienced a proliferation of dedicated long-term institutions for addressing climate risks. Some countries that established new climate change strategies have also proposed establishing new coordination agencies (Kenya, Mozambique); however, setting up these institutions has taken time. In Pakistan, various agencies are directly or indirectly addressing climate change matters but in the absence of a dedicated agency within the focal Ministry.

### Existing building Blocks- Implications for applying the TAMD approach:

There appears to be a favourable and a stable environment for applying the TAMD framework in countries with established policy frameworks and dedicated climate change institutions (e.g. Nepal).

In countries where climate change strategies include institutional strengthening and setting up M&E systems (e.g. Kenya, Mozambique) there also appear to be sufficient building blocks to test the TAMD framework.

Testing TAMD could be a challenge in countries where new policy frameworks have been established but their development and implementation is sluggish (e.g. Ghana).

Overall, many countries have some form of information management systems in place, but data regarding climate change is often inadequate. Some of these challenges may be addressed when proposed central information systems in these countries are made fully operational.

## Monitoring and Evaluation (M&E) systems

In addition to building blocks for climate resilience, the TAMD approach relies on M&E systems to track and measure adaptation. Cross-country analysis of the state of M&E systems in TAMD countries has shown the following trends:

**M&E Systems for measuring socio-economic parameters:** M&E systems for measuring socio-economic parameters vary greatly between TAMD countries. These M&E systems are often designed to meet the needs of national M&E policies, donor M&E systems, and/or programme-based M&E frameworks. The government's statistical units in some countries are institutionalised within a central unit; while in others the collection of statistics is dispersed across sectoral ministries.

**M&E Frameworks and Institutions for measuring adaptation performance:** Countries that have strong policy and institutional frameworks for addressing climate risks also have better evaluation systems for measuring adaptation performance. In most TAMD countries national climate change strategies have proposed new M&E frameworks for measuring adaptation performance; however, operationalization has taken time. At present, M&E systems in participating countries are largely intervention based, where development partners have defined the precise M&E requirements. Countries have also proposed new M&E institutions and some have recently strengthened and revived their existing institutions. Although in one TAMD country the institutional arrangement for M&E is practically absent.

M&E systems for measuring adaptation are evolving in all countries. However, these M&E systems are not necessarily embedded within the national M&E systems of the countries. Dedicated new institutions for M&E were also proposed in some countries but the setting up of these institutions has experienced long delays.

### **Existing M&E Systems - Implications for applying the TAMD approach:**

Across all TAMD countries, no unified evaluation framework is in place for climate change adaptation and most M&E systems are intervention based. Some countries have proposed to establish new centralised M&E systems and have advanced to the stage of developing comprehensive M&E frameworks, but climate change performance measurement is not yet embedded within national systems. This could mean low levels of commitment for M&E of climate change adaptation amongst sectoral ministries while testing the TAMD.

Testing TAMD could be a challenge in the absence of sufficient institutional arrangements for M&E. Dedicated M&E institutions or coordinating bodies are proposed in some countries but in others there is no dedicated arrangement for coordination.

In some countries setting up M&E systems has taken a long time. The timelines for implementation could have implications for feasibility of TAMD in an uncertain environment.

# INTRODUCTION

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The TAMD approach involves an analysis of multiple country cases during different phases of framework elaboration: (a) appraisal and design phase; (b) preparation for prototype development; (c) prototype development; and (d) pilot implementation of the framework. The purpose of this cross-country meta-analysis is:

**Aggregation:** Summarise, synthesise and integrate results from a number of cases.

**Analysis:** Analyse the differences in the results among cases.

**Informing:** Inform future study design to ensure iterative improvement in each stage for further elaboration of the TAMD framework.

**Learning:** Learn and share information across countries.

This report summarises the findings from the appraisal and design phase of five TAMD countries: Ghana, Kenya, Mozambique, Nepal, and Pakistan. The analysis presents a contextual understanding of: (a) policy frameworks, institutional arrangements and information services in relation to climate risk management that exist within TAMD countries; and (b) the M&E systems in place for measuring socio-economic and climate change adaptation parameters.

## Approach

To understand the country context and preparedness for climate risk management, we have applied the *building blocks framework*<sup>1</sup> to examine the policy and institutional environment within which the M&E systems of participating countries are embedded.

The *building blocks framework* identifies three building blocks for successful climate change mainstreaming into development planning: (a) an enabling environment; (b) policies and planning; (c) projects and programmes. The enabling environment for mainstreaming climate change includes the political will to make climate policy and the information services that guide it. The policy and planning block includes the policy frameworks together with institutional arrangements and finance mechanisms. The projects and programmes block takes mainstreaming to the project level. The framework is flexible and the three blocks are non-hierarchical and non-sequential. The flexibility of the framework allows it to be adapted and applied as per the needs of this analysis. To understand the policy and institutional context within which the M&E systems of TAMD countries are embedded, we have analysed the TAMD countries against the following selected building blocks:

**Policy and planning:** (a) *Policy frameworks*; (b) *Institutional frameworks*

**Enabling environment:** (a) *Information services*

The national monitoring and evaluation systems in each country were then assessed to understand what M&E frameworks and institutions are being used for measuring socio-economic and climate change changes across TAMD countries.

This cross-country assessment explains the potential for further implementation of the Tracking Adaptation and Monitoring Development (TAMD) approach.

This report is divided into following sections:

Section 2 – A cross-country synthesis and analysis of information systems, policies and institutional frameworks and the implications for testing the TAMD approach.

Section 3 - A synthesis and analysis of the M&E systems in place for measuring socio-economic and climate related changes and their implication on testing TAMD.

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<sup>1</sup> The Building Blocks framework was developed by a diverse group of government staff from least developed countries (LDCs) who came together at a course facilitated by IIED in Tanzania, to share and reflect on their countries experiences and needs around integrating climate change into development planning.

# BUILDING BLOCKS FOR CLIMATE RISK MANAGEMENT IN TAMD COUNTRIES

## Information services

The term “information services” is being used to refer to the Information sources (inventories, data sets) and systems (tools & methods and institutional arrangements) available in countries for generating, managing and communicating information related to climate as well as development parameters. The successful application of the TAMD framework is dependent on the nature of information systems that exist within the participating countries.

Table 1: Information systems for development and socio-economic parameters by TAMD Country

Information services	Ghana	Kenya	Mozambique	Nepal	Pakistan
Central agency for information	x	x	x	x	x
Central portal/Information system	x	x			
Existing central CC info system				x	
Proposed central CC info		x	x		

As shown in Table 1, all participating countries have an agency for information management and some also have a central portal for collecting socio economic data from different government institutions and distributing it within the government. The following is an overview of the different ‘agencies’ and ‘portals’ found in each country examined:

- **Central agency for information management:** *Ghana* has a central coordinating agency – National Statistical Service (NSS) and a central management agency – Ghana Statistical Services (GSS) that provides data for various parameters. *In Kenya*, the National Bureau of Statistics (KNBS) is the principal government agency that collects analyses and disseminates statistical data. *In Mozambique*, the National Institute of Statistics (NIE) has been producing relevant socio-economic data. *In Nepal*, the Central Bureau of Statistics (CBS) under the National Planning Commission manages statistical information. *In Pakistan*, Pakistan Bureau of Statistics (PBS) under Ministry of Economic Affairs and Statistics is the apex organisation that monitors all aspects of data collection and management.
- **Central portal and information system:** Across the five TAMD countries, only Ghana and Kenya have a central information system in place. The GSS has developed a database or information management system called ‘Ghana Info’. Kenya has developed an online system managed by Ministry of Finance – Electronics Projects Monitoring System (EPMS) - to capture real time information on project implementation. Kenya has also set up Kenyan Environmental Information Network (KEIN) information that provides environmental data to the public; however, the portal requires additional funds for further development.

**Information systems for climate change-** Information systems for climate change information are less advanced, but are beginning to evolve in some countries that have recently developed their national climate change strategies:

- Nepal is the only country that has developed a National Climate Change Knowledge Management Centre (NCCKMC).
- Kenya and Mozambique recently proposed to establish climate change data repositories within Kenya’s Climate Change and Action Plan (KCCAP) and Mozambique’s National Climate Change Strategy established in 2012. These plans are yet to be operationalized.
- In Pakistan, no central information system for climate change has yet been developed.

**Challenges related to information systems:** Information systems for socio-economic dimensions exist in most TAMD countries. Information management for climate change is also improving in some countries such as Nepal. The existing systems are though less sufficient to handle information to measure climate change indicators due to following key reasons-

- Information is scattered between sectors, projects and ministry levels. Sharing between the central agency and MDAs is lacking in Ghana, Kenya, Nepal and Mozambique.
- Information management is project by project not programmatic, particularly in Ghana.
- Climate related information is collected, but not sufficiently processed or analysed. Usability of data for decision-making is therefore lacking in countries such as Nepal and Ghana.
- Quality of data is often unknown because information is scattered and difficult to locate (e.g. Kenya).
- In both Kenya and Ghana there is no continuous coverage of adaptation information due to resource constraints and reliance on infrequent surveys carried out by short-term donor funded programmes.

## Policy and planning – policy and institutional frameworks

**Policy frameworks-** Climate resilient objectives are reflected in policy documents, actions plans, or national strategies of all TAMD countries, but no country has passed specific climate change legislation.

Table 2 Climate Change related policy frameworks in each country

CC policy frameworks	Ghana	Kenya	Mozambique	Nepal	Pakistan
National CC policy framework	x				
CC Adaptation/ response strategy	x	x	x		
Climate Change Policy				x	x
National CC action plan		x			
NAPA			x	x	
Low carbon & climate resilience strategy				x	

The following is an overview of climate change related policies in the countries analysed:

- In Nepal and Mozambique, the policy frameworks have evolved from NAPA type projectised arrangement to a National Climate Change Policy/ Strategy.
- Kenya and Ghana have recently developed their National Climate Change Strategies followed by a Kenyan Climate Change Action Plan (KCCAP) and Ghanaian Climate Change Policy Framework (NCCPF) to operationalize these strategies.
- Climate change is an embryonic concept in policy making of Pakistan. Pakistan has very recently developed its first National Climate Change Policy in 2013.

**Institutional arrangements-** The institutional arrangements for climate change planning differ across TAMD countries. For example:

- In Nepal there has been a proliferation of institutions since 2009, which include institutionalisation of climate change within a Climate Change Division based in the focal Ministry– Ministry of Environment and Science and Technology (MOSTE); and establishment of coordinating bodies such as the Climate Change Council (CCC) and Multi-stakeholder Climate Change Initiatives Coordination Committee (MCCICC).
- Kenya and Mozambique have proposed new institutions within their recent action plan/strategy. New dedicated coordinating bodies have been established by both Kenya (Climate Change Secretariat) and Mozambique (UMC). However, the setting-up of these institutions is taking time.

- In Ghana, climate change is addressed and coordinated by an Environment Protection Agency (EPA) led technical specialist unit.
- In Pakistan, a Ministry of Climate Change has been established recently, but no dedicated focal agency exists within the ministry. Various agencies are directly or indirectly addressing climate change matters.

Table 3 Institutions addressing climate change in each country

CC Institutions	Ghana	Kenya	Mozambique	Nepal	Pakistan
Key Ministry	MEST	MEMR	MICOA	MOSTE	Key Ministry
Focal point within a key ministry	EPA (tech lead)	CC Secretariat	UMC	CC Mgt division	Focal point within a key ministry
Coordinating body	NCCC	CCS, NCCC	UMC	CCC, MCCICC	Coordinating body

### Existing building blocks--Implications for applying the TAMD approach

The successful application of an evaluation framework for assessing climate change will depend on the national capacity of the countries to address climate related matters. The following assumptions can be made regarding the potential application of the TAMD framework in given context or circumstances:

- There appears to be a favourable and a stable environment for applying the TAMD framework in countries with established policy frameworks and dedicated climate change institutions (e.g. Nepal).
- In countries where climate change strategies include institutional strengthening and setting up M&E systems (e.g. Kenya, Mozambique) there also appear to be sufficient building blocks to test the TAMD framework.
- Testing TAMD could be a challenge in countries where new policy frameworks have been established but their development and implementation is sluggish (e.g. Ghana).
- Overall, many countries have some form of information management systems in place, but data regarding climate change is often inadequate. Some of these challenges may be addressed when proposed central information systems are made fully operational.

# MONITORING AND EVALUATION SYSTEMS

## M&E Systems for measuring socio economic parameters

M&E systems for measuring socio-economic parameters vary across TAMD countries. These are guided by national M&E policies; donor-led M&E systems; or programme based M&E frameworks. The statistical units of some countries are institutionalised within a central unit; but it is dispersed across ministries in most participating countries.

- Kenya has an integrated M&E system that is guided by the National M&E policy. A central unit for M&E has also been established. Kenya's National Integrated Monitoring and Evaluation System (NIMES) developed indicators for the vision 2030.
- M&E frameworks are based upon main development policies in Ghana and Mozambique. In both the countries M&E arrangements within development frameworks such as Growth and Poverty Reduction Strategy of Ghana (GPRS), Ghana Shared Growth Development Agenda (GSDA) and Mozambique's Poverty Reduction Strategy (PRSP/PARP) are being strengthened and augmented to measure socio-economic parameters. In Mozambique, a Performance Assessment Framework (PAF) was jointly defined by donors and the government. M&E divisions and statistical units are also established within the Ministries Department and Agencies (MDA) of Ghana, Kenya and Mozambique.
- In Nepal, M&E for specific socio-economic sectors sits within a multi-layer M&E system put in place from the national to the local level. Several new approaches and M&E guidelines are rapidly being developed by the National Planning Commission (NPC) – for example, Managing for Development Results (MfDR) Guidelines (2009) and Results Based Monitoring and Evaluation (RBME) Guidelines (2010). A Central Monitoring and evaluation department has also been developed in Nepal.
- In Pakistan, the measurement of socio-economic dimensions is done in an intermittent manner through M&E arrangements defined jointly by donors and the national government.

Table 4

M&E systems- socio economic measurement	Ghana	Kenya	Mozambique	Nepal	Pakistan
Integrated M&E system guided by the national M&E policy		x			
Builds on M&E frameworks of main development policies (e.g. PRSP)	x		x		
Donor M&E system			x		x
Sector M&E positioned within national M&E system				x	x
Main responsible agency	NDPC, GSS PPMED	MPND, <u>MED</u> , CPPMU	DPME	<u>CMED</u> NPC	PC

**Challenges in measuring socio economic dimensions:** Most TAMD countries have a system in place to measure socio-economic parameters; however some challenges limit their effectiveness:

- In Nepal, although strong central and ministry level statistical institutions are in place, M&E is not prioritised across the government system. High turnover of trained M&E staff poses human capacity challenges, and skilled M&E staff members prefer roles with more financial responsibilities.

Inadequate capacity further reduces the ability of the departments to use M&E results in meaningful decision making.

- In Ghana, the M&E frameworks have strong emphasis on monitoring activities, but not corresponding evaluation systems. Similar to Nepal, M&E staff in Ghana is competent in data collection but lack skills in using data for decision-making.
- The Kenyan government has the skills and capacity to report on inputs but the capacity to report outcomes is lacking.
- Information sharing between statistical units of MDA and central M&E units is inadequate in most TAMD countries. Central units often lack the authority to compel different actors to provide data - particularly observed in Mozambique and Ghana.
- One of the common concerns across countries such as Nepal, Kenya and Ghana is the lack of coordination and integration between sectoral M&Es and national systems for M&E.

## M&E Systems for Climate Change Adaptation

**M&E Frameworks for measuring adaptation performance:** In most TAMD countries national climate change strategies have proposed M&E frameworks to measure adaptation performance, however, operationalization has taken time. M&E of adaptation is therefore largely intervention based, and development partners often define the precise M&E requirements. The following is an overview of the M&E systems analysed:

- No single unified M&E system on climate change adaptation exists in Nepal, Mozambique, Ghana and Pakistan. M&E of adaptation is largely intervention based, often defined by the development partners. However, in Nepal there are national procedures for M&E and reporting requirements and efforts are being made to develop a comprehensive results framework and management information system under the Strategic Program for Climate Resilience (SPCR).
- Kenya, Mozambique and Ghana have proposed dedicated M&E frameworks within their national climate change strategies to measure their adaptation performance. Kenya has defined a Monitoring, Tracking and Verification (MRV) system in line with TAMD, but the framework is yet to be operationalized. Mozambique aims to establish a national M&E framework for climate change adaptation by 2014, supported by its SPCR. Ghana's NCCAS and policy framework proposes a dedicated M&E unit and a comprehensive M&E mechanism, which is not yet formally set up.

Table 5

M&E framework for adaptation	Ghana	Kenya	Mozambique	Nepal	Pakistan
Dedicated M&E FW for adaptation		x	Proposed	Developing	
Intervention based M&E frameworks	x		x	x	x

**M&E institutions for climate change adaptation:** Participating countries differ greatly in the development of M&E institutions. Countries either have M&E institutions in place, are strengthening existing institutions, have proposed new institutions, and/or have no M&E institution for adaptation. The following is any overview of country situations:

- **M&E Coordination body already exists-** Nepal has established a coordination committee to harmonise programmes and develop a joint results frameworks.
- **Proposals for new institutions or revival of existing ones-** Ghana is yet to establish an institutional base, but a dedicated M&E unit has been proposed under their climate strategy. Kenya

has defined an institutional mechanism for its new MRV system that builds on existing institutional structures and draws coordination support from the newly established climate change secretariat.

- **No Institutions for M&E of climate change adaptation-** Both Pakistan and Mozambique lack an institutional mechanism for measuring climate adaptation. However, Mozambique's environment ministry (MICOA) has proposed to lead the M&E systems for CCA through its central coordinating agency (UMC) in partnership with their planning ministry (MPD).

Table 6 M&E Institutions for CCA in each country

M&E institutions for CCA	Ghana	Kenya	Mozambique	Nepal	Pakistan
Dedicated M&E unit	Proposed	Proposed			
Institutional mechanism built on		x			
New coordinating body		x		x	
No institutional arrangement yet			x		x

**Challenges-** Although M&E systems for climate change adaptation continue to evolve, some key issues observed across participating countries are:

- M&E systems for measuring adaptation are being developed across countries; however, these M&E systems are not necessarily embedded within the national M&E systems of the countries.
- New dedicated institutions for M&E are proposed in countries such as Ghana and Kenya; however, in practise these new institutions have taken a long time to operationalize.
- M&E systems also receive a low level of importance amongst different sectoral ministries, as the higher-level staff members are often less committed to measuring performance. Because higher-level staff members often neglect M&E it is sometimes considered an add-on to tasks that can be managed by temporary contracted staff (e.g. in Mozambique and Kenya).
- Inadequate capacity in climate change adaptation is a key challenge for countries such as Mozambique and Nepal. This affects their ability to collect, manage or use data in meaningful ways. Setting baselines, coordination and conducting M&E across different scales also becomes a challenge in the absence of adequate national capacity.
- Countries also experience asymmetries with respect to information and knowledge due to different management capacities at different levels.
- Because the countries analysed have not developed common indicators for adaptation different sectoral indicators are used for assessing adaptation performance.

## Existing M&E systems---Implications for applying the TAMD approach

A snapshot overview of existing M&E systems helps us to draw some initial insights into the gaps and strengths in M&E systems of participating countries. Some conclusions can therefore be drawn on the potential application of TAMD-

- Across all TAMD countries, no unified evaluation framework is in place for climate change adaptation and most M&E systems are intervention based. Some countries have proposed to establish new centralised M&E systems and have advanced to the stage of developing comprehensive M&E frameworks, but climate change performance measurement is not yet embedded within national systems. This could mean low levels of commitment for M&E of CCA amongst sectoral ministries while testing the TAMD.
- Testing TAMD could be a challenge in the absence of sufficient institutional arrangements for M&E. Dedicated M&E institutions or coordinating bodies are proposed in some countries but in others there is no dedicated arrangement for coordination.
- In some countries setting up M&E systems has taken a long time. The timelines for implementation could have implications for feasibility of TAMD in an uncertain environment.

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## Project materials

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### Climate change

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