# Initiative for Climate Action Transparency - ICAT

# Capacity building needs assessment for second focus area

# Deliverable 3.1

**Prepared for:**

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**Submitted by:**

Sasha Naidoo, Juanette John, Daleen Lötter

Holistic Climate Change Impact Area, Smart Places, CSIR

snaidoo@csir.co.za

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## DISCLAIMER



## PREPARED UNDER

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## 1. Introduction

The ICAT project's second focus area in South Africa is to develop a framework to monitor and evaluate (M&E) the impacts of weather and climate-related disasters that will support the M&E of climate change in South Africa. This framework will support understanding of what is needed to monitor and evaluate the impacts of weather and climate-related disasters. It will also specify what needs to be included for reporting on these impact assessments to the international community in terms of the data that is needed (metrics for what is measured), how the data is stored, who stores it and what their role is.

A questionnaire was compiled by adapting guiding questions from the Capacity Assessment Tool for Climate Action Transparency tool developed by the International Centre for Climate Change and Development (ICCCAD) as part of ICAT Phase I. This was done by shortlisting and reframing questions in a way that was more applicable to the South African context. These questions were shared with a range of stakeholders at a series of forums focussing on Disaster Risk Management (DRM) to communicate and advocate for the M&E systems that the project team were developing. The questionnaire was also shared at meetings with selected stakeholders/organisations to facilitate cross-departmental cooperation and identify any gaps in data or clarify points of uncertainty in terms of roles or detail on data collected.

The purpose of the questions was to understand whether stakeholders conduct M&E within their organisations for their climate adaptation projects, and if so, whether they experience any barriers to do so effectively, and whether they have any needs to strengthen their capacity to do so going forward. The sections below highlight the stakeholder engagement process and key messages from responses to the questions in terms of the goals and strategy of their organisation, systems and infrastructure they have in place, human resources, and organisational assets.

## 2. Approach

### 2.1. Stakeholder mapping

Stakeholder mapping for the second focus area is discussed in the report for ICAT Phase II, 'ICAT Deliverable 2.1.2: Stakeholder mapping for the second priority area'. This section contains an overview of selected relevant information from that report.

Stakeholders identified were considered essential in terms of data provision, technical assistance in identification of pilot adaptation projects, and facilitating further engagement with stakeholders linked directly with the pilot studies. These stakeholders are key role players in national and municipal government departments and included the Department of Forestry, Fisheries and Environment (DFFE), the South African Weather Services (SAWS), the National Disaster Management Centre (NDMC), Statistics South Africa (StatsSA), and National Treasury, among others. Appendix 1 provides details on stakeholders engaged as part of the capacity needs assessment process.

The DFFE is responsible for coordination and management of all climate change-related information such as mitigation, adaptation, and monitoring and evaluation. The DFFE is responsible for the implementation of the United Nations Framework Convention on Climate Change (UNFCCC), Kyoto Protocol and Paris Agreement, on behalf of the South African Government. The SAWS is an agency of the DFFE and is the authority for weather and climate forecasting in South Africa. The SAWS maintains the CAELUM weather events database, a restricted commercial product that provides a description of historical extreme weather events dating back as far as the early 1900's and continuing up to the present day. The Severe Weather Impact Database (SWID) has been proposed to replace the CAELUM database.

The objective of the NDMC as an entity of the Department of Co-operative Governance and Governmental Affairs, is to co-ordinate and integrate disaster management in South Africa, with special emphasis on prevention and mitigation by national, provincial, and municipal organs of state, statutory functionaries and other role players involved in disaster management and communities. The Provincial Disaster Management Centres (PDMCs) focus on Provincial, and Municipal DMSs on local disaster risk management data. The PDMCs meet quarterly at the Head of Disaster Management Centres Forum (HoCeF)). The primary purpose of the HoCeF is to create a platform for heads of centres to engage one another on operational and strategic matters pertaining to disaster management coordination to advance cooperative governance across the spheres of government. Statistics South Africa (StatsSA) releases information on mortality and causes of death, which includes those attributed to natural disasters.

### 2.2. Stakeholder engagement

A series of workshops with selected focus groups, and stakeholders representative of target sectors, were consulted to inform the various components of the project. This included discussions on current databases, data availability and data gaps, the framework developed to monitor and evaluate the impacts of climate and weather-related disasters, and the capacity needs assessment in monitoring and evaluation of these impacts. Virtual meetings on MS Teams were held with groups of selected stakeholders/organisations to facilitate cross-departmental cooperation and identify any gaps in data or clarify points of uncertainty in terms of roles or detail on data collected. As part of these meetings, stakeholders were introduced to the need for understanding gaps in capacity in terms of M&E and examples of questions from the capacity needs questionnaire were illustrated. Input from participants was requested to assist the ICAT team in understanding capacity building needs related to the monitoring and evaluation (M&E) of impacts of climate and weather-related disasters.

Presentations on both focus areas within the ICAT project were made at a series of forums focussing on Disaster Risk Management (DRM) to communicate and advocate for the M&E systems that the project team were developing. Participation in these forums were facilitated by the DFFE. Forums engaged with included the Heads of Disaster Management Centres Forum (HoCeF), the Benguela Current Convention Climate Change Consultative Workshops, and the DFFE Climate Change Adaptation Technical Working Group (CCA-TWG). At these forums, the CSIR were afforded the opportunity to engage with relevant managers and technical experts from national, provincial, and municipal disaster management centres and

government departments to raise awareness of the ICAT project, the reporting tools being developed and advocate for their uptake by municipal governments, obtain data, and invite input to the capacity needs questionnaire. Presenting and discussing key findings at various stages in the development of project deliverables contributed to refining the reporting tools developed and ensuring project outcomes were informed by, and support user needs in South Africa.

### 2.3. Capacity needs assessment questionnaire

The purpose of the capacity needs assessment was to understand whether stakeholders conduct M&E within their organisations for their climate adaptation projects, and if so, whether they experience any barriers to doing so effectively, and have any needs to strengthen their capacity to do so going forward.

The CSIR team adapted the Capacity Assessment Tool for Climate Action Transparency tool developed by the International Centre for Climate Change and Development (ICCCAD) as part of ICAT Phase I by shortlisting and reframing questions in a way that is more applicable to the South African context. These questions are provided in Appendix 2 and consisted of the following categories:

1. Goals and strategy
2. Systems and infrastructure
3. Human resources
4. Organization assets

## 3. Key findings

### 3.1. Responses received

The capacity needs survey was introduced and shared with a large group of stakeholders via email and as part of progress presentations of the ICAT project at meetings with stakeholders and at the various forums in which the ICAT team participated. The overall response rate to the questionnaire was low. However, the responses that were received included responses from organisations and institutions that collect, report or store data that inform the evaluation of the impacts of weather and climate-related disasters and inputs from these organisations were very relevant to the study.

Responses were received from representatives from national government (DFFE, NDMC, StatsSA), SAWS, SANBI, Cape Nature, and the Garden Route District Municipality (GRDM, a case study municipality in the project's first focus area).

### 3.2. Responses to questions

#### 3.2.1. Goals and strategy

Most of the organisations that responded had a mandate, vision and strategy with provisions for weather-related disaster impact monitoring, which is an objective in the strategic plan. These plans are reviewed regularly (varied between 1-5 years depending on the organisation).

Examples of frameworks/guidelines used during the review process to monitor and evaluate disaster risk reduction included the Sendai Framework for disaster risk reduction, use of seasonal risk profiles, impact-based forecasting, the national disaster management framework, municipal structures act, and published research.

New information considered when revising strategic plans included the following:

- Research information from institutions (i.e. universities and/or industrial research);
- Stakeholder contribution to the development of the National Framework on Climate Services (NFCS);
- Seasonal risk profiles;
- Recommendations from global forums to which the SA Government subscribes e.g. Conference of the Party (COP) Forums and the Paris Agreement;
- The Integrated Indicator Framework (IIF) which consolidates information from various frameworks and which include disaster-related indicators e.g. Sustainable Development Goals (SDGs) and the National Development Plan (NDP); and
- Information from the Provincial Disaster Management Advisory Forum and Provincial and Municipal Coastal Committees.

Plans to include or improve Climate Change Disaster Risk Reduction (DRR) monitoring within the organisation's strategic plan varied among respondents depending on their strategic objectives. These plans include:

- Having a more informed coastal vulnerability assessment from climate change;
- Development of the framework to monitor and evaluate the impacts of weather and climate-related disasters to support M&E in the country;
- Work with sector departments to develop disaster management plans to address risks, including climate change;
- Using the latest technology and collaboration partners to improve monitoring capabilities; and
- Development of Protected Areas Disaster Management Plan.

#### 3.2.2. Systems and Infrastructure

In terms of early warning systems, the SAWS plays a central role in development and operationalization of an integrated climate-driven multi-hazard early warning system as the national custodian of climate in South Africa. SAWS operates a seamless forecasting system utilizing a multi-model approach covering forecasting times scales from Nowcasting (1-2 hours) to climate change timescales (decades and longer). Together with real-time observation platforms such as satellite, weather radar and automated weather stations the forecasting framework is focused on the provision of warning services to protect life and property. Very short-term warnings are aimed at saving lives whilst longer timescale products influence planning and longer-term decision making across the economic sectors of South Africa.

Specific M&E frameworks or systems in place to regularly collect, collate and disseminate information related to the impacts of weather and climate-related disasters (losses and damages) included the following:

- National Climate Change Information Systems (NCCIS) which assists with the collection and dissemination of climate change-related information around the country;
- Hazard reports of declared disasters;
- Database of all severe weather events and their impacts (through the media , social media etc.); and
- The Integrated Indicator Framework which consolidates information from various frameworks and include disaster related indicators.

In terms of access to ICT equipment, hardware, and software for data collection, this varied among organisations depending on their function. The SAWS had access to High Performance Computer (HPC) - mainly used for Numerical Weather Prediction (NWP) Models, a server network for processing of data and model output into actionable products and services, national weather *in-situ* and remote sensing observation network, and an archived meteorological database of quality controlled data, collected via the observation networks. The DFFE utilised online systems to access information.

Financial operations of national government departments are guided by the Public Finance Management Act (PFMA) No.1 of 1999. In terms of section 38 of the PFMA, an accounting officer of a department must ensure that that department has and maintains effective, efficient and transparent systems of financial and risk management and internal control.

### 3.2.3. Human resources

Most respondents felt there was insufficient personnel and support in their organisation to support and implement the objectives of their strategic plan. Respondents indicated that staff are knowledgeable about climate M&E, specifically to evaluate the effectiveness of projects to contribute toward nationally determined contributions (NDCs) or sustainable development goals (SDGs). Examples of this included the inclusion of the work of the Oceans and Coastal department of the DFFE in the country's Nationally Determined Contributions (NDC) and Sustainable Development Goals (SDGs). Projects within the DFFE are also geared towards

realising the goals communicated in the NDC and SDGs, bridging the gaps/ needs identified in the NDC and the overreaching strategic goals such as the National Adaptation Strategy. StatsSA coordinates the national, regional, continental and global reporting processes and also consults all local structures to give capacity on safe keeping of data that will be needed to measure progress of all identified developmental indicators.

In terms of having a focal person for M&E activities within the organisation, the DFFE and SAWS indicated that they have individuals within their organisation, e.g. within the Monitoring and Evaluation Unit, as well as senior managers for Research and DRR.

Specific training needs identified included training on early warning systems and training on developing and measuring/computing indicators relevant to climate change disaster risk reduction. Training on M&E tools and systems available, and assistance to develop M&E framework and DRR and Climate into the organisation's strategy/plans and the envisaged Disaster Management Plan (currently in development) was highlighted by Cape Nature.

### 3.2.4. Organization Assets

Respondents indicated that their organization stays informed about current issues related to climate change and disaster risk reduction in the following ways:

- through collaboration with key role players/ stakeholders;
- through participation in a number of local, regional and international fora (including disaster fora) where policy and plans are made and discussed;
- through participation in various weather and climate expert groups of the World Meteorological Organisation (WMO) where the latest technologies and information are shared;
- through subscribing to meteorological and climatological journals where the latest development on scientific and technical advances are published; and
- through the annually reviewed Integrated Indicator Framework (IIF).

Systems in place to keep respondents informed about current issues include facilitation of stakeholder engagements by an organisation, establishing partnerships on early warning systems, and WMO General Assembly meetings and other ad-hoc scientific and expert group meetings/workshops. (The effectiveness of these are monitored through regular reporting on the implementation and adherence to guidelines and decisions).

Partnerships in place among respondents include those with:

- Other government departments;
- Academia (for training and research purposes;
- research organisations;

- National Meteorological Services (NMSs) from neighbouring countries and larger Met Services such as UKMO, USA , Germany, Australia;
- Non-governmental organisations (NGOs);
- Communities; and
- Funder organisations.

Given that most of the respondents were from government departments, they do have access to platforms for policy advocacy and influence. Examples include contributions to the development of the Climate Change White Paper, National Climate Change Adaptation Strategy, and Nationally Determined Contributions (DFFE).

- DFFE is the policymaking-body in government that establishes legislation and policies pertaining to the environment including air quality and pollution.
- The NDMC contributes to discussions to Inter-Ministerial Committees, Parliament, National Disaster Management Advisory Forum, NATJOINTS and various other task teams.
- The SAWS is a state institution reporting to DFFE. Through the monitoring of data and research output SAWS influences DFFE on a national but also provincial and local government (municipal) level.
- StatsSA contributes to the Forum of South African Directors-General (FOSAD) which is a planning and coordination mechanism composed of the directors-general of national and provincial government departments as well as management of the South African Local Government Association (SALGA).
- CapeNature serves on several national forums and are a provided opportunity to comment and participate in the development or review of relevant national and provincial legislation, policy, and strategies.

## 4. Discussion

The purpose of the questionnaire was to assess and understand capacity needs of relevant stakeholders towards understand current institutional capacity for undertaking M&E of climate actions and determine existing gaps in organisational capacity. In terms of goals and strategies of the organisations who responded, the majority were government departments and their mandate, vision and strategy had provisions for weather-related disaster impact monitoring, while weather-related disaster impact monitoring is an objective in the strategic plan. These organisations utilised new information available when updating their plans and indicated their intention to include additional research areas and collaborations to improve disaster management plans. In terms of access to ICT equipment, hardware, and software for data collection, this varied among organisations depending on their function.

South Africa is developing a comprehensive, integrated National Climate Change Information System (NCCIS), also referred to as the National Monitoring and Evaluation (M&E) system. This is a web-based platform for the tracking, analysis, and enhancement of South Africa's

progress towards the country's transition to a low-carbon economy and climate-resilient society. The system is composed of several modules, which include the National Climate Change Response Database, National Desired Adaptation Outcomes, Climate Information Centre, Tracking and Evaluation System and has various maps and search capabilities. The implementation plan of the M&E system for SA follows a phased approach. It was noted that the development of the framework to monitor and evaluate the impacts of weather and climate-related disasters, which forms part of the ICAT project, would further support M&E in the country.

Respondents highlighted the need for more personnel and support in their organisation to support and implement the objectives of the strategic plan and to coordinate M&E activities within their organisations since not all respondents indicated that a focal person for M&E was in place. Specific training needs identified included training on early warning systems and training on developing and measuring/computing indicators relevant to climate change disaster risk reduction. Training on M&E tools and available systems, and assistance to develop the M&E framework, DRR and climate change into the organisation's strategy/plans and the envisaged Disaster Management Plan was also highlighted.

The respondents actively participate in various local, regional, and international fora, as well as staying informed on current issues utilising several available resources. It is through participation in specifically the local (sub-national and national) fora that training needs can be addressed. Further to that, the consideration of local languages when rolling out these training events, including training on the use of M&E-related tools, is key to ensure the use of language that is not too technical and include definitions and explanations of terminology. The target audience need to be identified prior to training and awareness sessions and the handing over of tools to ensure that the presentation approach is suitable for the intended recipients.

**Appendix 2.**

Link to Capacity Needs Questionnaire using 'Google docs': https://forms.gle/RjWssH1DxybQMpY36

**Goals and strategy**

1.1 Does the organisation's mandate, vision and strategy have provisions for weather-related disaster impact monitoring?

1.2 Is weather-related disaster impact monitoring one of the objectives in the strategic plan?

1.3 How often is the organisation's strategic plan reviewed?

1.4a Does the strategic review process include the monitoring and evaluation (M&E) of disaster risk reduction (DRR)?

1.4b If Yes, Does the review process use any frameworks/guidelines to monitor and evaluate disaster risk reduction (DRR)?

1.4c If the strategic review process does not include the monitoring and evaluation (M&E) of disaster risk reduction (DRR), or needs revision, please provide details if possible.

1.4d If any frameworks/guidelines are used during the review process to monitor and evaluate disaster risk reduction, can you give some examples if possible?

1.5a Does your organisation consider new information from government, research forums etc, when reviewing and revising your strategic plan?

1.5b If your organisation does consider new information from government, research forums etc, when reviewing and revising their strategic plan, can you give any examples?

1.6 Is there enough personnel and support in the organisation to support and implement the objectives of the strategic plan?

1.7a Are there any plans to include (if not present), or improve (if present), Climate Change Disaster Risk Reduction (DRR) monitoring within the organisation's strategic plan?

1.7b If Yes (there are plans to include or improve CC DRR monitoring), can you elaborate or give more information?

**Systems and Infrastructure**

2.1a Please explain what the organisation's strategic planning and objectives are.

2.1b Please explain or provide some information on how the organisation's strategic planning and objectives inform operations of the organisation?

2.2a. Are any of the organisation's current activities related to early warning systems?

2.2b. If any of the organisation's current activities focus on early warning systems, please elaborate if possible.

2.3a Are there specific M&E frameworks or systems in place in the organisation to regularly collect, collate and disseminate information related to the impacts of weather and climate related disasters (losses and damages)?

2.3b If your organisation has specific M&E frameworks or systems in place to regularly collect, collate and disseminate information related to the impacts of weather and climate related disasters (losses and damages), please elaborate if possible.

2.4a Does the organization have access to (or use) ICT equipment, hardware and software for data collection?

2.4b Please elaborate on the types of ICT equipment, hardware and software that are currently in place, or planned to use for data collection.

2.5a Are gender and social inclusion considered in the organisational structure, the operations of the organisation and when planning for community impact or policy impact of projects?

2.5b If possible, please elaborate on how gender and social inclusion are considered or can be considered in the organisational structure, the operations of the organisation and when planning for community impact or policy impact of projects.

2.6a Do the financial operations of the organisation have robust systems and controls in place?

2.6b If possible, please elaborate on the financial operations systems and controls that are in place or should be in place.

**Human resources**

3.1a Is there scope in the organization's Research and Development (R&D) activities for projects linked to the M&E of the impacts of weather and climate related disasters (losses and damages)?

3.1b If you think there is scope in the organization's R&D activities for projects linked to the M&E of the impacts of weather and climate related disasters (losses and damages), please elaborate if possible.

3.2 Does your organisation evaluate the community impacts of your projects?

3.3a. Are staff knowledgeable about climate M&E, specifically to evaluate the effectiveness of projects to contribute toward nationally determined contributions (NDCs) or sustainable development goals (SDGs)?

3.3b. If you answered YES, please elaborate how projects within your organisation are contributing towards NDCs or the SDGs - if possible.

3.4a Is there an M&E focal person (or persons) within the organisation/unit?

3.4b If yes, can you elaborate on the roles of the M&E person(s) within the organisation/unit?

3.5a Do the staff that are undertaking projects related to the M&E of the impacts of weather and climate-related disasters (losses and damages) have sufficient access to training opportunities?

3.5b Do the staff that are undertaking M&E projects have any specific training needs?

3.5c If training needs have been identified, please give some examples if possible.

**Organization Assets**

4.1 How does the organization stay informed about current issues related to climate change and disaster risk reduction?

4.2a. Are there systems in place to assist the organisation with staying informed?

4.2b. If there are systems, what are they and how is the effectiveness of these systems monitored?

4.3a. Is the organization well informed regarding the roles and functions of other relevant actors within its domain of work?

4.3b. What types of partners does the organization have (i.e., who does the organisation work with, e.g., academia etc.)?

4.3c. Is the organization's functions and roles recognized by local communities and other actors in the field or sector?

4.4a. Is the organization doing any research or work that may influence policy or advocacy related to Disaster Risk Reduction?

4.4b. If research or work is being done, please provide examples of relevant research or work, if possible.

4.4c. Does the organization have access to platforms for policy advocacy and influence?

4.4d. If the organisation has access to platform, please provide examples of these platforms, if possible.