Tenth Meeting of the Expert Group on Environment Statistics

#### COMMON MARKET FOR EASTERN AND SOUTHERN AFRICA



#### Implementation Guidelines on climate change statistics and indicators by

Dr Anand Sookun /Gerard Barutwanayo Consultants

## Implementation Guidelines



#### Global Set of Climate Change Statistics and Indicators

**Implementation Guidelines** 

## United Nations Statistics Division 31 January 2023

#### https://unstats.un.org/unsd/envstats/Climate %20Change/Implementation Guidelines.pdf

#### Table of contents

	Acknowledgments	11
	List of abbreviations	iv
	Table of contents	vi
	List of boxes	. viii
	List of figures	. viii
	1. Introduction	1
	1.1. Background	3
	1.2. Rationale for the Guidelines	6
	1.3. Aims and objectives	9
	1.4. How to use the Guidelines	10
	2. Understanding climate change	11
	3. The Global Set of Climate Change Statistics and Indicators	14
	4. Developing a national programme of climate change statistics	24
	4.1 Role of NSOs, UNFCCC-NFPs and key stakeholders	24
	4.1.1 Role of NSOs	24
	4.1.2 Role of UNFCCC-NFPs	25
	4.1.3 Role of other key stakeholders	26
	4.1.4 Collaboration between NSO, UNFCCC-NFP and key stakeholders	26
	4.2 Assessment and implementation of the Global Set	30
	4.2.1 Assessment of available and needed resources	30
	4.2.2 National action plan	35
	4.2.3 High-level buy-in	36
	4.2.4 National institutional arrangements	39
	4.2.4.1 Define institution with a legal mandate for production of climate change statistics	39
	4.2.4.2 Engage key stakeholders	41
	4.2.5 Capacity building at national level	
	4.2.6 Multi-disciplinary approach	43
	5. Production of climate change statistics	
	5.1 MRV/Transparency system	45
	5.2 Data sources for climate change statistics	
	5.2.1 Map and assess sources of available statistics and indicators	52
	5.2.1.1 Quality assurance	52
	5.2.1.2 Generic Statistical Business Process Model	
	5.2.2 Define and prioritize gaps in data and methods	
	5.2.3 Establish data collection processes	
	5.2.4 Database building	
	5.2.5 Data exchange protocols	
	5.3 Dissemination of national climate change statistics and indicators	
	5.3.1 Publication guidelines.	
_	5.4 Evaluating contribution to national policy demands and international reporting requirements	
	ferences	
A	nnexes	
	Annex 1: Contents of a national action plan on climate change statistics	
	Annex 2: Global Set of Climate Change Statistics and Indicators	71

## **Implementation Guidelines**

#### **Aims and objectives**

The Guidelines aim to help countries to improve the monitoring of climate change statistics, its impacts and response actions by better informing the UNFCCC-NFPs about the benefits of official statistics and by guiding the NSOs to increase their engagement in the area of climate change. The overall objectives of the Guidelines are to:

- help countries to set up the national consultation processes which can embrace this multidisciplinary statistical work in a way complementary to the ongoing and future reporting to UNFCCC;
- deepen countries' self-assessment activities using the Global Set; and
- provide the basis for countries to initiate the development of a national programme for sustained production of climate change statistics within the national statistical system (NSS).

## **Implementation Guidelines**

# Role of NSOs, NFPs and key stakeholders

4.1.1 Role of NSOs

4.1.2 Role of UNFCCC-NFPs

4.1.3 Role of other key stakeholders

4.1.4 Collaboration between NSO, UNFCCC-NFPs and key stakeholders

**National examples** 



## Implementation Guidelines

#### Self-assessment for building a National action plan on climate change statistics

The self-assessment will produce the needed understanding of what are the available resources (human and technical), available data, data gaps and what is (still) needed to support national climate policies and activities. Prioritization of the needed datarelated activities should be done taking into account the suitability of data collection methods including costs and reliability

	s Activities		Ye	ar 1		Year 2				Year 3			
Steps		Q1	Q2	Q3	Q 4		Q 2	Q 3	Q 4	Q 1		Q 3	Q 4
1	Establish/strengthen relationship between NSO and UNFCCC- NFP												
2	Engage stakeholders and complete the self-assessment using the CISAT												
3	Establish a committee, inter-institutional working group or task force or expand an existing one												
4	Define an institution with a legal mandate	Γ									$\square$		
5	Establish collaboration/communication channels between	Γ											
	stakeholders and make institutional arrangements												
	Designate national thematic experts	Γ									$\square$		_
	Develop ToRs/MoUs												
6	Engage high-level support for TWG - data collection/formation	Γ					Γ				$\square$		_
	of unit / mobilizing resources												1
	Conduct institutional review and skills capacity assessment	Γ					Γ				$\square$		
	Develop project proposals/applications	Γ		Γ			Γ				$\square$		_
7	Strengthen human resources	Γ											
	Provide training and capacity building												
	Designate desk officers/core team												
	Hire staff/consultants												
8	Improve technical resources												
	Improve IT infrastructure (software and hardware)												
9	Develop a national programme/national action plan on climate	Γ									Π		
	statistics												1
	Develop national set of climate indicators	Γ											
	(consistent/complementary with NDCs/NAPs/NCs) and metadata												
	Map the data sources and assess data quality												
	Define gaps and prioritize work on methods and data collection												
	Develop data collection methods (such as climate change surveys)												
	Integrate the programme/plan into NSDS and national climate	Γ											
	policies												
10	Undertake data collection/database building												
	Establish data exchange protocols												
	Compile statistics/indicators												
	Prepare analysis of key findings and draft a report												
	Organize a validation workshop/TWG and stakeholders												
11	Prepare contributions to national policies and the reports for UNFCCC												
12	Disseminate statistics and indicators												
13	Conduct user surveys												
14	Evaluate and define priorities for future improvements	Γ	1										

### About COMESA

• COMESA is a regional Economic community (REC) with 21 member states. It is one of the eight Regional Economic Communities (RECs) recognized by the African Union.

#### Support on environment and climate change statistics

- The African Development Bank (AfDB) and COMESA Secretariat signed an agreement in 2021 for COMESA to be the Executing Agency for Statistical Capacity Building Program Phase V which targets 37 African Development Fund eligible countries. Among the areas of intervention in the SCB V is capacity building and technical assistance in environment and climate change statistics
- Other funding on environment and climate change has been provided by the European development fund (EDF-11) Institutional capacity building programme (ICBP)

## COMESA experience (1)

- Regional workshop on the SCB V Program
- National capacity building and assessments (CISAT)

- 37 ADF countries participated in the workshop
- 33 Countries responded to the Online Assessment
- Assessment shows that 19 Implement the Global set

Three Countries assisted technically

- 🗋 Kenya
- Burkina Faso
- Zimbabwe

### Outcome of the Technical Assistance

- National institutions that compile environment and climate change statistics were reinforced
- Coordination between national institutions involved in the collection of environment and climate change statistics were enhanced
- Set their own CISAT by assessment using the Global CISAT
- Set up the roadmap for producing the climate change statistics report
- Production of report namely in Zimbabwe

## ONLINE ASSESSMENT CLIMATE CHANGE STATISTICS AND INDICATORS

• Committees and Participation in UNSD Global Consultation

D4. Did the country participate in the Global Consultation on Climate Change Statistics and Indicators ?



D.2. Is there a committee, inter-institutional working group or task force in place to coordinate the production of climate change statistics and indicators? (Yes/No) <sup>14 responses</sup>



#### • Data on Drivers

E1. For Drivers of climate change - does the country have data on the following, if any, at the national level and what are their respective formats in which they are available?



E2. For Drivers of climate change - if the country has data on the following, how are they collected?



#### • Data on Impacts

E3. For Impacts of climate change - does the country have data on the following, if any, at the national level and what are their respective formats in which they are available?



E4. For Impacts of climate change - if the country has data on the following, how are they collected?



#### • Data on Vulnerability

E5. For Vulnerability related to climate change - does the country have data on the following, if any, at the national level and what are their respective formats in which they are available?



E6. For Vulnerability related to climate change - if the country has data on the following, how are they collected?



#### • Data on Mitigation

E7. For Climate Change Mitigation: does the country have data on the following, if any, at the national level and what are their respective formats in which they are available?



E8. For Climate Change Mitigation, if the country has data on the following, how are they collected?



#### Data on Adaptation

E9. For Climate change Adaptation, does the country have data on the following, if any, at the national level and what are their respective formats in which they are available?



#### E10. For Climate Change Adaptation, if the country has data on the following, how are they collected?



#### • Data Requirements and Publication

F1. Does the country require data for climate change reporting for national, regional or international uses?



F2. Does the country publish data for climate change reporting for national, regional or international uses?



#### Remarks

- The major constraint is lack of data and resources to collect data and process it, need for capacity building and collaboration between institutions. Absence of a technical committee makes it difficult to input environment and climate change statistics in its bulletins and reports.
- It is also difficult for users to access environmental related data in the institutions that produce the data. There are lack of MoUs that will compel line ministries and institutions producing environmental data to submit to the national statistical office.
- Reporting: UNFCCC, BUR, National Inventory on GHG
  - FANRPAN
  - UNCCD
  - UNCBD for Biodiversity Information

Future plans

- Plan is to build capacity and constitute a taskforce to collect data and store.
- Capacity building on mainstreaming climate change in surveys; compilation of climate change using administrative data; Policy-use analysis.
- Provide Capacity building on the production and management of Environment and Climate Change Statistic.
- Sensitize the government on the importance of Environment and Climate Change Statistics.
- Provide a standalone budget for the production of Environment and Climate Change Statistics and;
- Revitalize the dissemination method (e.g., Websites) of the Environment and Climate Change Statistics.

## Other guidelines?

- <u>Compiling climate change indicators: an accounting approach.</u> <u>Available from</u> <u>https://www.unsiap.or.jp/on\_line/Guideline/2023/2023\_1\_CIM.pdf</u>
- <u>https://unfccc.int/sites/default/files/resource/Hand%20book\_EN.p</u> <u>df</u> developed by UNFCCC to support MRV/transparency of climate action.
- <u>https://www.ipcc-nggip.iges.or.jp/public/2019rf/pdf/1\_Volume1/19R\_V1\_Ch01\_Intro</u> <u>duction.pdf</u> developed by IPCC for compiling national GHG inventories
- <u>https://unece.org/statistics/publications/implementation-guidelines-CES-core-set-CCRSI</u> developed by the UNECE as a Set of Core Climate Change-Related Indicators and Statistics Using SEEA

Thank you for your attention!