



Tenth Meeting of the Expert  
Group on Environment Statistics  
Wednesday, 4 October 2023

# Application of Climate Change Statistics and Indicators Self-Assessment Tool (CISAT)

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# Implementation support

1. Following the adoption of the Global Set, UNSD has focused on completing and promoting a set of implementation support tools, including:
  - Climate Change Statistics and Indicators Self-Assessment tool (CISAT) which was drafted and tested in a number of pilot countries in Africa, South America and the Caribbean regions
  - Implementation guidelines, initially drafted before the adoption of the Global Set, then revised and improved, and discussed at the ninth meeting of the Expert Group on Environment Statistics (EGES)
  - Training materials and presentations



- The Global Set in its most detailed form, including the metadata, is presented in the [Climate Change Statistics and Indicators Self-Assessment Tool \(CISAT\) Part II](#).
- The full description of the Global Set and its metadata is also included in the Background document to the Report of the Secretary-General, entitled [Global Set and metadata](#).
- The Global Set is introduced and briefly described in the [Report of the Secretary-General on Climate Change Statistics to the Statistical Commission \(E/CN.3/2022/17\)](#) available in the six UN languages: [https://unstats.un.org/unsd/envstats/climatechange\\_docs\\_conf.cshtml](https://unstats.un.org/unsd/envstats/climatechange_docs_conf.cshtml)
- Implementation support materials including a self-assessment tool and e-learning materials are disseminated via UNSD website: <https://unstats.un.org/unsd/envstats/climatechange.cshtml>
- In addition, if implementation advice and support are required, please contact UNSD at: [envstats@un.org](mailto:envstats@un.org)



# CISAT Package



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- **Introduction:** short introduction and guidance for completing the self-assessment;
- **Part I: Institutional Dimension of Climate Change Statistics and Indicators:** aims at collecting general information on the institutional dimensions of climate change statistics;
- **Part II: Statistics and Indicators Assessment:** each individual indicator and statistic can be assessed in terms of relevance, methodological soundness and data availability.
- **Metadata sheets** in a Word file are linked to each indicator in the Excel file (Part II) via hyperlinks.

## Climate Change Statistics and Indicators Self-Assessment Tool (CISAT)

### Introduction



Climate Change Statistics and Indicators Self-Assessment Tool

(CISAT)

### Part I: Institutional Dimensions of Climate Change Statistics and Indicators



Global Set of Climate Change Statistics and Indicators

## Climate Change Statistics and Indicators Self-Assessment Tool (CISAT)

### Part II: Statistics and Indicators Assessment



Climate Change Statistics and Indicators Self-Assessment Tool

(CISAT)

Metadata



Global Set of Climate Change Statistics and Indicators



Prepared by the United Nations Statistics Division

Version 3.0

(adapted from the BACKGROUND DOCUMENT TO THE REPORT OF THE SECRETARY-GENERAL ON CLIMATE CHANGE STATISTICS (E/CN.C/2012/1))

United Nations Statistical Commission, 2012

Available from: <http://www.unstats.un.org/unsd/envstats>, <http://www.unstats.un.org/unsd/indicators>, <http://www.unstats.un.org/unsd/indicators>

## Introduction

The Climate Change Statistics and Indicators Self-Assessment Tool (CISAT) gives United Nations member States an opportunity to undertake a thorough and detailed assessment of the statistics and indicators in the Global Set of Climate Change Statistics and Indicators (Global Set). The United Nations Statistical Commission, at its fifty-third session in 2012, adopted the Global Set of Climate Change Statistics and Indicators as the framework for climate change statistics and indicators to be used by countries when preparing their own sets. Similar to the Basic Set of Environment Statistics in the Framework for the Development of Environment Statistics (BSES), the Global Set is comprehensive, but not exhaustive, and designed to support countries according to their individual needs, concerns, priorities and resources.

The Global Set serves as the statistical framework for monitoring and reporting climate action with suitable indicators to serve as guidance for countries to prepare their own sets. It covers the full policy area of the PCC, drivers, impacts, vulnerability, mitigation and adaptation which are broken down into 34 topics. In each area, the most important indicators to describe the topics are listed, thus providing guidance to countries developing national climate change statistics programmes in a comprehensive and balanced manner. Also included are statistics for which distinct methodologies are identified in this way. The Global Set contains 158 indicators and 300 statistics. The purpose of this structure is to ensure balanced coverage of indicators and statistics, and to provide direction to policies (e.g., on drivers, mitigation, adaptation, etc.). In addition, the structure is designed to help countries select and prioritize the statistics and indicators most relevant to their national context.

The list of indicators and statistics included in the Global Set, as well as the Metadata are best accessed from the Global Set itself. This list of indicators and statistics is provided for information only.

### Contents

A. Identification of institutions	2
B. National policies/strategies	3
C. Mandate and organization of climate change statistics	4
D. Production and reporting of climate change statistics	5
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F. Technical assistance and training	8
G. The way forward in climate change statistics	9
General Comments	10

GLOBAL SET (ADOPTED IN MARCH 2012)	GLOBAL SET (ADOPTED IN MARCH 2012)	GLOBAL SET (ADOPTED IN MARCH 2012)	GLOBAL SET (ADOPTED IN MARCH 2012)	GLOBAL SET (ADOPTED IN MARCH 2012)	GLOBAL SET (ADOPTED IN MARCH 2012)	GLOBAL SET (ADOPTED IN MARCH 2012)	KEY ASSESSMENT	
							RELEVANCE	DATA AVAILABILITY
1. Total greenhouse gas emissions per year	13	13	13	13	13	13	13	13
2. Total emissions of carbon dioxide	13	13	13	13	13	13	13	13
3. Greenhouse gas emissions from land use, land-use change and forestry	17	17	17	17	17	17	17	17
4. Total greenhouse gas emissions from the national economy	19	19	19	19	19	19	19	19
5. Greenhouse gas emissions per capita	21	21	21	21	21	21	21	21
6. Greenhouse gas emissions to gross fixed capital formation of direct investment	23	23	23	23	23	23	23	23
7. Greenhouse gas emissions to value added of foreign-controlled multinationals enterprises	25	25	25	25	25	25	25	25
8. Carbon footprint	27	27	27	27	27	27	27	27
9. Global concentration of greenhouse gases	29	29	29	29	29	29	29	29
10. Total primary energy production from fossil fuels	31	31	31	31	31	31	31	31
11. Total energy supply from fossil fuels	33	33	33	33	33	33	33	33
12. Share of fossil fuels in total energy supply	35	35	35	35	35	35	35	35
13. Total energy consumption per capita	37	37	37	37	37	37	37	37
14. Energy intensity measured in terms of primary energy and gross domestic product	39	39	39	39	39	39	39	39
15. Fossil fuel dependency	41	41	41	41	41	41	41	41
16. Amount of fossil fuel subsidies (production and consumption) per unit of gross domestic product	43	43	43	43	43	43	43	43
17. Population growth	45	45	45	45	45	45	45	45
18. Urban population as a proportion of total population	47	47	47	47	47	47	47	47
19. Number of fossil-fueled vehicles per capita	49	49	49	49	49	49	49	49
20. Vehicle miles travelled per capita	51	51	51	51	51	51	51	51
21. Intensity of use of forest resources	53	53	53	53	53	53	53	53
22. Deforested area as a proportion of total forest area	55	55	55	55	55	55	55	55
23. Ratio of area of organic soils devoted for agriculture to total area of organic soils	57	57	57	57	57	57	57	57
24. Livestock units per agricultural area	59	59	59	59	59	59	59	59
25. Use of nitrogen fertilizers per hectare of total agricultural area (cropland and pastures)	61	61	61	61	61	61	61	61
26. Growth in fish-up value	63	63	63	63	63	63	63	63
27. Direct agricultural loss attributed to disasters	65	65	65	65	65	65	65	65
28. Crop loss due to climate extremes	67	67	67	67	67	67	67	67
29. Impact of climate change on livestock productivity	69	69	69	69	69	69	69	69
30. Growing degree days	71	71	71	71	71	71	71	71
31. Forest area as a proportion of total land area	73	73	73	73	73	73	73	73

### Contents

#### Introduction

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<https://unstats.un.org/unsd/envstats/Climate%20Change/cisat.cshtml>

## Part I: Institutional Dimension of Climate Change Statistics and Indicators

Part I focuses on the overall institutional and organizational structure of national statistics in the country and on specific information regarding climate change statistics in terms of, inter alia, policy frameworks, mandates, institutional setup, organization, collaboration, resources, international cooperation and uses.

It is divided into the following sections:

- a) Identification of institutions
- b) National policies/strategies
- c) Mandate and organization of climate change statistics
- d) Production and reporting of climate change statistics
- e) Inter-institutional collaboration
- f) Technical assistance and training and
- g) The way forward in climate change statistics



# CISAT Part II

Part II of the CISAT lists all 158 indicators and 190 statistics included in the Global Set, followed by the main Global Climate Policy References, Statistical References and Self-Assessment questions organised in separate sections in an Excel spreadsheet.

## Part II template:

GLOBAL SET (ADOPTED in MARCH 2022)					GLOBAL CLIMATE POLICY REFERENCES		STATISTICAL REFERENCES				Focal Institutions and data sources			
Area	Topic	Number	Indicator	Statistic	Tier	Theme	Paris Agreement article	PAWP-Katowice	Method (frameworks, standards, guidelines)	Global		Regional	National Data Sources	National focal institution
										FDES reference	SDG reference	SendaI Framework reference	UN-ECE reference	
<b>DRIVERS</b>														
			<i>Total greenhouse gas emissions</i>											
1			<a href="#">Total greenhouse gas emissions per year</a>		1	GHG emissions	13.7a	Decision 18/	IPCC; SDG; UN-ECE		13.2.2 Total greenhouse gas emissions	[Similar to] UN-ECE 09a	Environment Agency/NSOs and Central Banks	Environment Agency/NSOs and Central Banks
				Total emissions of direct greenhouse gases (equivalent to the indicator)	1	GHG emissions	13.7a	Decision 18/	IPCC; FDES		[Similar to] FDES 3.1.1.a Total emissions of direct greenhouse gases		Environment Agency/NSOs and Central Banks	Environment Agency/NSOs and Central Banks
2			<a href="#">Total emissions of indirect greenhouse gases</a>		1	GHG emissions	13.7a	Decision 18/	IPCC; FDES		[Similar to] FDES 3.1.1.b Total emissions of indirect greenhouse gases		Environment Agency/NSOs and Central Banks	Environment Agency/NSOs and Central Banks
3			<a href="#">Greenhouse gas emissions from land use, land use change and forestry</a>		1	GHG emissions	13.7a	Decision 18/	IPCC; FDES; UN-ECE		[Similar to] FDES 3.1.1.a Total emissions of direct greenhouse gases		Environment Agency/NSOs and Central Banks	Environment Agency/NSOs and Central Banks
4			<a href="#">Total greenhouse gas emissions from the national economy</a>		2	GHG emissions			SEEA-CF; UN-ECE			UN-ECE 09a	NSO	NSOs and Central Banks
5			<a href="#">Greenhouse gas emissions per capita</a>		1	GHG emissions			IPCC; FDES		[Similar to] FDES 3.1.1.a Total emissions of direct greenhouse gases		Environment Agency/NSOs and Central Banks	Environment Agency/NSOs and Central Banks
				Total emissions of direct greenhouse gases (equivalent to the indicator)	1	GHG emissions	13.7a	Decision 18/	IPCC; FDES		[Similar to] FDES 3.1.1.a Total emissions of direct greenhouse gases		Environment Agency/NSOs and Central Banks	Environment Agency/NSOs and Central Banks
6			<a href="#">Greenhouse gas emissions in gross fixed capital formation of direct investment</a>		3	GHG emissions			SEEA-CF				NSOs and Central Banks	NSOs and Central Banks
7			<a href="#">Greenhouse gas emissions in value added of foreign controlled multinational enterprises</a>		3	GHG emissions			SEEA-CF				NSOs and Central Banks	NSOs and Central Banks
				GHG emissions in output of foreign-controlled enterprises	3	GHG emissions			SEEA-CF				NSOs and Central Banks	NSOs and Central Banks

# CISAT Part II Self-Assessment

		SELF-ASSESSMENT																				4 Future Plans																					
Focal Institutions and data sources		1 Relevance				2 Data/statistic/indicator characteristics										3 Methodological soundness																											
		1.1 Relevance/priority for climate change-related policies		1.2 Requirements or user requests for this indicator/statistic		2.1 Data characteristics and availability				2.2 Institution(s) collecting data on this statistic/indicator		2.3 Format and characteristics of statistic/indicator		2.4 Institution(s) compiling this statistic/indicator		2.5 Main reasons why the statistic/indicator is not available or not updated		3.1 International comparability		3.2 Methodology characteristics																							
National Data Sources	National focal institution	1.1.1 Relevance of indicator/statistic at the national level	1.1.2 Relevance/link	1.1.3 Priority for national data collection	1.2.1 Sub-national	1.2.2 National	1.2.3 Regional	1.2.4 International	1.2.5 Specification	2.1.1 Data availability	2.1.2 Latest year available	2.1.3 Earliest year available	2.1.4 Periodicity	2.1.5 Data type	2.1.6 Reference/link	2.2.1 Collected by NSO	2.2.2 Collected by Ministry of Environment or equivalent institution	2.2.3 Collected by Other (specify)	2.3.1 Similarity of statistic/indicator at the national level to the international one	2.3.2 Format of statistic/indicator	2.4.1 Compiled by NSO	2.4.2 Compiled by Ministry of Environment or equivalent institution	2.4.3 Compiled by Other (specify)	2.5.1 Resource constraints	2.5.2 Methodological/technical difficulty in data collection	2.5.3 Incomplete quality	2.5.4 Inaccessibility	2.5.5 Lack of institutional set-up/coordination	3.1.1 Methodology	3.1.2 Reference/link	3.1.3 Main reason why the methodology used is not sound	3.2.1 Type of data source	3.2.2 Category of measurement	3.2.3 Unit of measurement	3.2.4 Potential aggregations and scales	3.2.5 Classification/groupings							
Environment Agency	National climate change reporting authorities																																										
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## Instructions

The Global Set of Climate Change Statistics and Indicators was recommended as the framework for climate change statistics and indicators to be used by countries when preparing their own sets. It is designed with enough flexibility to be adapted to individual countries' climate change concerns, priorities and resources. A country's national set may require additional indicators and statistics to be included as well as the possible exclusion of those indicators and statistics which are defined as not relevant or not applicable (see 1.1.1 below). There may also be a need to modify some indicators and statistics to better reflect the national circumstances.

## Global Set

Part II of the CISAT lists all 158 indicators and 190 statistics included in the Global Set, followed by the main Global Climate Policy References, Statistical References and Self-Assessment questions organised in separate sections in an Excel spreadsheet. The following definitions apply:

**Area [column B]:** A schematic framework developed by the IPCC summarises the complexity of climate change as a sequence of events: drivers, impacts, vulnerability, mitigation and adaptation. These events are applied as five top-level areas in the Global Set. Each indicator is assigned to one of the five IPCC areas as a primary belonging, while some indicators were also assigned as applicable in one or more additional areas.

**Topic [column C]:** As in the FDES (p. 3), the statistical topics represent the quantifiable aspects of the areas taking into account the types and sources of the statistics needed to describe them.

**Number [column D]:** Each indicator is numbered from 1 to 158.

**Indicator [column E]:** As in the FDES (p. 7), environmental indicators are used to synthesize and present complex environment and other statistics in a simple, direct, clear and relevant way... may take various

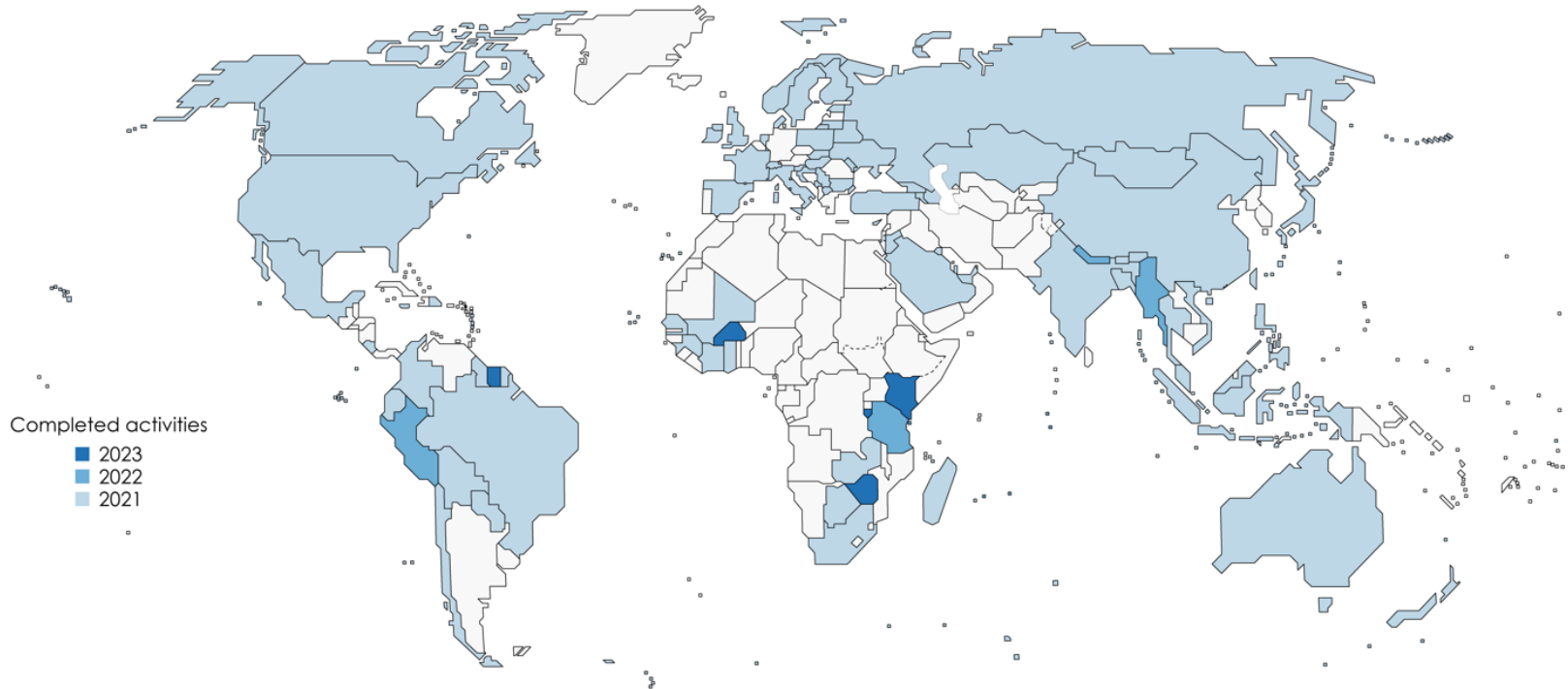
### 1. Total greenhouse gas emissions per year

Field	Description	
<b>Indicator</b>	Total greenhouse gas emissions per year	
<b>Statistics</b>		Total emissions of direct greenhouse gases (excluding LULUCF)
<b>Area</b>	Drivers	
<b>Topic</b>	Total greenhouse gas emissions	Total greenhouse gas emissions
<b>Themes</b>	GHG emissions	GHG emissions
<b>Paris Agreement article</b>	13.7a	13.7a
<b>PAWP-Katowice</b>	Decision 18/CMA.1, chapter II, para. 47-49	Decision 18/CMA.1, chapter II, para. 47-49
<b>FDES</b>		3.1.1.a [similar to]
<b>SDG</b>	13.2.2	
<b>Sendai Framework</b>		
<b>Tier</b>	1	1
<b>Definition</b>	Greenhouse gases (GHG) are those gaseous constituents of the atmosphere, both natural and anthropogenic, that absorb and emit radiation at specific wavelengths within the spectrum of thermal infrared radiation emitted by the Earth's surface, the atmosphere itself, and by clouds, [IPCC, p. 550, <a href="https://www.ipcc.ch/sr15/chapter/glossary/">https://www.ipcc.ch/sr15/chapter/glossary/</a> ] Emissions are the release of GHGs and/or their precursors into the atmosphere over a specified area and period of time. Removals conversely are the absorption of atmospheric GHGs by a sink. CO <sub>2</sub> is the only gas for which removals are estimated in the national GHG inventory. [FDES BSES 1.3.1 and 3.1.1, p.8, <a href="https://unstats.un.org/unsd/envstats/fdes/MS1.3.1_GHG_missions.pdf">https://unstats.un.org/unsd/envstats/fdes/MS1.3.1_GHG_missions.pdf</a> ]	Direct GHG emissions are those directly emitted into the atmosphere by a source. It includes CO <sub>2</sub> , CH <sub>4</sub> , N <sub>2</sub> O, HFC, SF <sub>6</sub> , PFC, NF <sub>3</sub> from agriculture, energy, industry waste, excluding LULUCF. GHG inventories under the UNFCCC cover estimation and reporting of anthropogenic GHG emissions and removals occurring on 'managed land'. Emissions resulting from fires in unmanaged forests would be considered as 'anthropogenic' if after burning the land use is changed, for example to pasture, and the land is accordingly re-categorized as 'managed'. [FDES BSES 1.3.1 and 3.1.1, p.8, <a href="https://unstats.un.org/unsd/envstats/fdes/MS1.3.1_GHG_missions.pdf">https://unstats.un.org/unsd/envstats/fdes/MS1.3.1_GHG_missions.pdf</a> ]
<b>Relevance</b>	Causes of climate change: Greenhouse gases cause the greenhouse gas effect which leads to global warming, as a result of long-wave (infrared) energy capture by the GHGs in the atmosphere and its downward re-emitting which causes warming at the lower atmosphere and land/ocean surface. [IPCC, <a href="https://www.ipcc.ch/site/assets/uploads/2018/02/ar4-wg1-chapter9-1.pdf">https://www.ipcc.ch/site/assets/uploads/2018/02/ar4-wg1-chapter9-1.pdf</a> ]	



# Growing engagement of countries [needs an update]

Climate Change Statistics



- Global Consultation (May- Sept 2021) – 86 countries (68 on part 1 and 75 part 2) and 26 organizations
- The engagement is wider than that, UNSD funded consultancies helped 2 more countries to do the assessment, another 9 countries to improve their earlier assessments in Africa
- Ongoing regional initiatives are also strengthening climate change statistics in countries

The boundaries shown and used on this map do not imply official endorsement or acceptance by the United Nations.



## APPLICATION OF CISAT IN PERÚ

## 1

### WHO COORDINATES?

- The functions of the INEI, the governing body of the National Statistical System, are to coordinate and/or execute censuses, statistics and population; conducting surveys and compiling indicators and indices; national and regional accounts and coordinating statistical activities.
- MINAM formulates, plans, directs, executes and evaluates the National Environmental Policy. The production of environmental statistics is their responsibility. The approval of the Framework Law on Climate Change and its regulations play an important role in the comprehensive management of climate issues.

## 3

### HOW LONG, WHAT IS THE PROCESS?

- The first review and completion of CISAT and metadata began in the months of June to September 2021
- The information reported has been developed by different government offices with competence in the different matters. The Institutions reviewed each individual indicator and statistic and evaluated the proposals according to theme, whether the indicator was relevant, methodologically sound and whether data were available.
- The INEI was responsible for reviewing and completing the indicators and statistics of its competence. Likewise, I coordinate with MINAM the progress of CISAT for its shipment to the United Nations.

## 2

### HOW MANY INSTITUTIONS PARTICIPATED?

- INEI and MINAM participated in UN video consultations on CISAT.
- MINAM convened the focal points to train them on CISAT filling, about 20 affiliated institutions and others linked to the environment participated.
- INEI carried out the follow-up and monitoring in the filling of the CISAT on: population, housing, poverty, unemployment.

## 4

### WHAT BENEFITS DID YOU GET ALONG OF THE PROCESS?

Improve the quality of the indicator :

- There are indicators that were not completed in the first consultation, but to date there are contributions or feedback on methodological details or information available on the indicator from the producing institutions. (Specialized questionnaires of international organizations and national institutions)
- Cases of indicators were presented, which, in their review and evaluation, it is observed that relevant and useful statistics are available for other environmental indicators.
- New indicators were included; (Precipitation, temperature)
- Some proposed indicators should be simplified because they are considered too complex, Several indicators need further methodological development

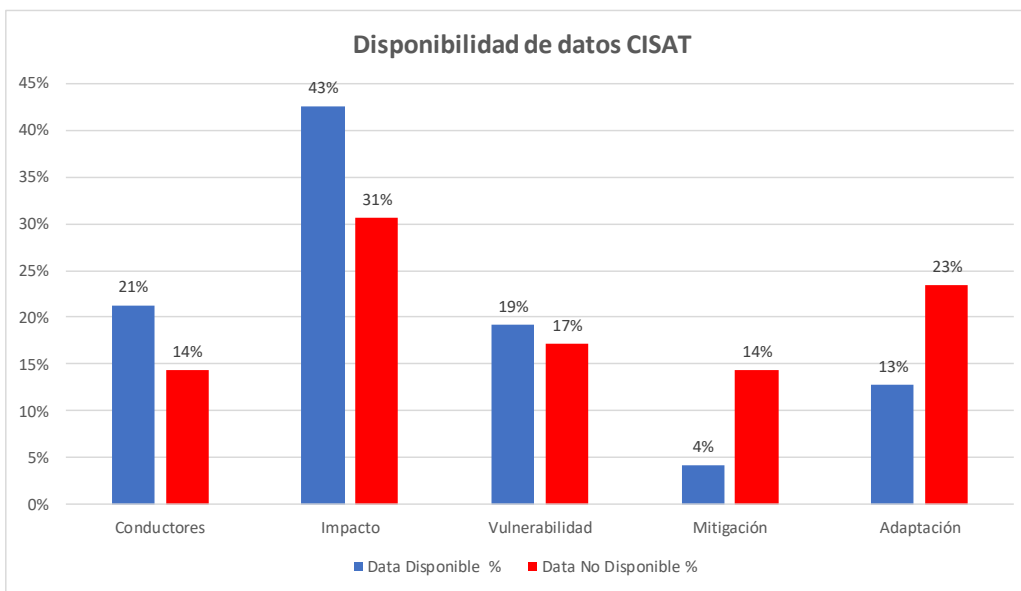
# APPLICATION OF CISAT IN PERU

**Tabla A: Estado de disponibilidad de datos por área del IPCC para el Conjunto Global de Estadísticas e Indicadores de Cambio Climático, 2023**

Area	Data Disponible		Data No Disponible		Total	
	Número	%	Número	%	Número	%
Conductores	10	21%	16	14%	26	16%
Impacto	20	43%	34	31%	54	34%
Vulnerabilidad	9	19%	19	17%	28	18%
Mitigación	2	4%	16	14%	18	11%
Adaptación	6	13%	26	23%	32	20%
<b>Total</b>	<b>47</b>	<b>100%</b>	<b>111</b>	<b>100%</b>	<b>158</b>	<b>100%</b>

Área	Tema	Número	Indicador	Estadística	Nivel	Tema	Data
<b>CONDUCTORES</b>							
			<i>Emisiones totales de gases de efecto invernadero</i>				
	1		<a href="#">Emisiones totales de gases de efecto invernadero por año</a>		1	emisiones de GEI	si
	2		<a href="#">Emisiones totales de gases de efecto invernadero indirectos</a>	Equivalente al indicador	1	emisiones de GEI	no
	3		<a href="#">Emisiones de gases de efecto invernadero por el uso de la tierra</a>	Equivalente al indicador	1	emisiones de GEI	no
	4		<a href="#">Emisiones totales de gases de efecto invernadero de la economía</a>	Equivalente al indicador	2	emisiones de GEI	si
	5		<a href="#">Emisiones de gases de efecto invernadero per cápita</a>		1	emisiones de GEI	no
	6		<a href="#">Emisiones de gases de efecto invernadero en la formación bruta de capital fijo de la inversión directa</a>		3	emisiones de GEI	no
	7		<a href="#">Emisiones de gases de efecto invernadero en valor agregado de empresas multinacionales bajo control extranjero</a>		3	emisiones de GEI	no
	8		<a href="#">huella de carbono</a>	Equivalente al indicador	2	emisiones de GEI	no
			<i>Concentración atmosférica de gases de efecto invernadero</i>				
	9		<a href="#">Concentración global de gases de efecto invernadero</a>	Equivalente al indicador	2	concentración de GEI	no
			<i>Producción, suministro y consumo de energía</i>				
	10		<a href="#">Producción total de energía primaria a partir de combustibles fósiles</a>		1	Energía	si
	11		<a href="#">Suministro total de energía a partir de combustibles fósiles</a>		1	Energía	si
	12		<a href="#">Proporción de combustibles fósiles en el suministro total de energía</a>		2	Combustibles fósiles	no
	13		<a href="#">Consumo final de energía per cápita</a>		1	Energía	si
	14		<a href="#">Intensidad energética medida en términos de energía primaria y producto interior bruto</a>		2	Energía	si
			<i>Combustibles fósiles</i>				
	15		<a href="#">Dependencia de combustibles fósiles</a>		3	Combustibles fósiles	no
	16		<a href="#">Monto de los subsidios a los combustibles fósiles (producción)</a>	Consulte la fuente original en los metadatos	2	Combustibles fósiles	no

**Gráfico A: Estado de disponibilidad de datos por área del IPCC para el Conjunto Global de Estadísticas e Indicadores de Cambio Climático, 2023**



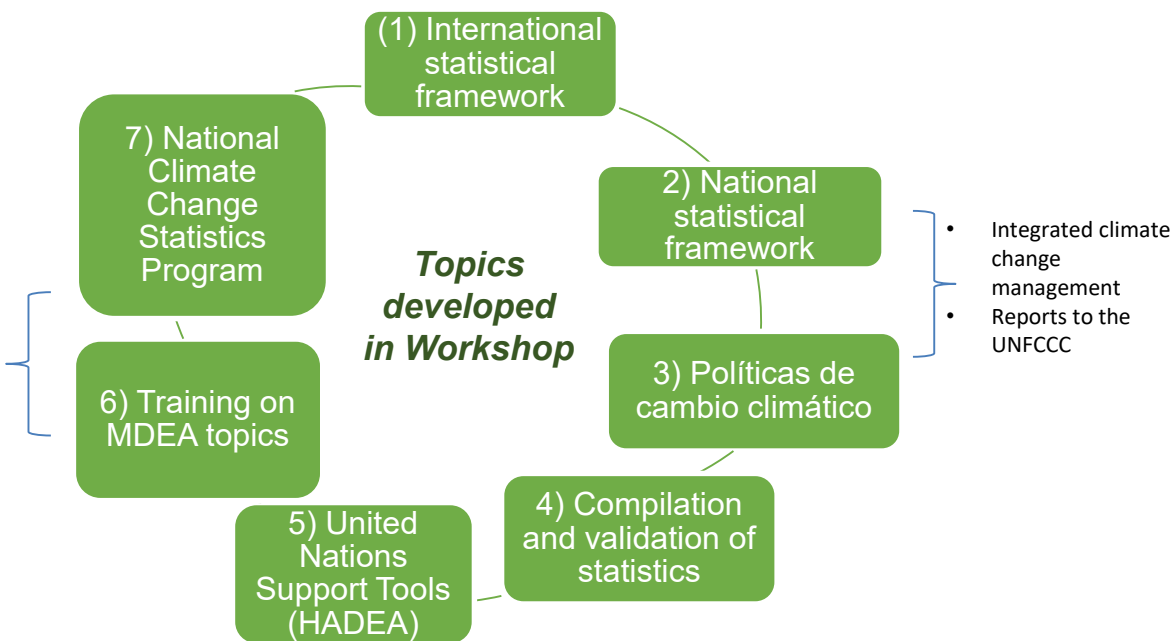
# NATIONAL WORKSHOP ON CLIMATE CHANGE IN PERU (DENU – ECLAC)

Workshop Objective: Strengthen national technical capacities for the development of environmental and climate change statistics.



- ☐ 43 participants.
- ☐ 20 institutions.

- Land use
- Ecosystems and biodiversity
- Water Statistics
- Solid Residues



**Note:** Framework for the Development of Environmental Statistics (FDES).

Self-Assessment Tool for Environmental Statistics and Indicators and Climate Change (ESSAT)

United Nations Framework Convention on Climate Change (UNFCCC).



**Article 2°.- The inter-institutional committee will be responsible for determining and establishing the technical guidelines to implement and develop the Environmental and Economic Accounts, according to the methodology and guidelines established in the System of Environmental-Economic Accounting – central framework – (SCAE 2012).**

## COMMITTEE

- Ministries (13)
- Decentralised public institutions (14)
- Municipalities (2)
- University (1)
- Other entities (3)



Note: Created by Chief Resolution No. 363-2016-INEI

## ACHIEVEMENTS OF THE COMMITTEE

- FOREST ACCOUNT (2021)
- National Forest and Wildlife Service

[https://www.inei.gob.pe/media/MenuRecursivo/publicaciones\\_digitales/Est/Lib1811/libro.pdf](https://www.inei.gob.pe/media/MenuRecursivo/publicaciones_digitales/Est/Lib1811/libro.pdf)

- PROGRESS IN WATER ACCOUNTS (2018)

<https://repositorio.ana.gob.pe/bitstream/handle/20.500.12543/4705/ANA0003201.pdf?sequence=1&isAllowed=y>

- ENVIRONMENTAL PROTECTION SPENDING REPORT (2021)

<https://sinia.minam.gob.pe/documentos/reporte-gasto-proteccion-ambiental-2014-2018>

## SUB-COMMITTEE OF CLIMATE CHANGE

- Ministry of Environment
- Ministry of Agrarian Development and Irrigation
- Ministry of Transport and Communications
- National Center for Strategic Planning
- National Weather and Hydrology Service
- National Institute of Statistics and Informatics

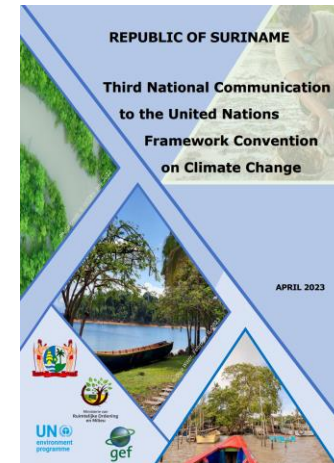
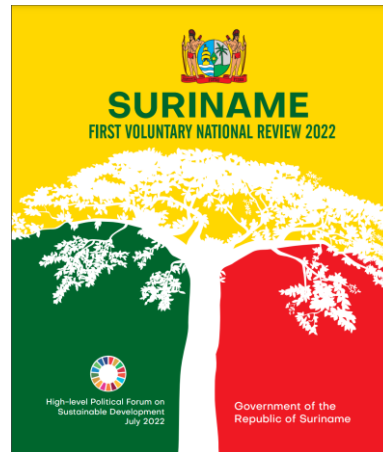
**Objective.- To promote the general interest and give relevance to the production of statistics and indicators on climate change with international standards, for the purpose of strengthening public policies related to mitigation and adaptation.**

### Activities

- Define priority climate change indicators - to address the country's environmental policy.
- Determine the quality of the proposed indicators.
- Promote the development of statistics on - climate change.



## APPLICATION OF CISAT IN SURINAME



## APPLICATION OF CISAT IN SURINAME (1)

- Suriname General Bureau of Statistics (GBS) has been engaged in the processes of piloting and developing the Global Set since 2020, and also piloted the CISAT in 2022.
- GBS coordinated the self-assessment with contributions from environmental stakeholders received via the biennial environment statistics workshop.
- Ministry of Spatial Planning and Environment (ROM) and National Institute for Environment and Development in Suriname (NIMOS) collaborated with GBS to provide information about climate change policies throughout the above stages

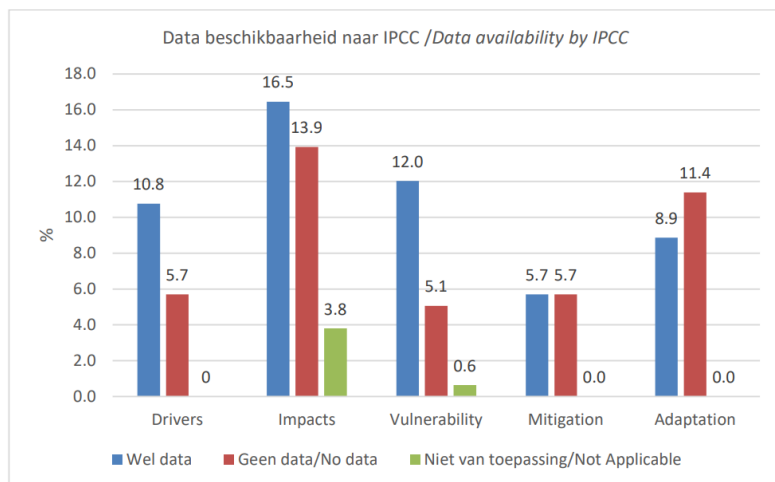




# APPLICATION OF CISAT IN SURINAM (2)

Table A: Data availability status by IPCC area for the Global Set of Climate Change Statistics and Indicators, 2023

IPCC gebied/ Area	Wel data/ Data		Geen data/ No data		Niet van toepassing/ Not Applicable (NA)		Totaal/ Total	
	Aantal/ Number	%	Aantal/ Number	%	Aantal/ Number	%	Aantal/ Number	%
Drijfveren/ Drivers	17	10.8	9	5.7	-	-	26	16.5
Gevolgen/ Impacts	26	16.5	22	13.9	6	3.8	54	34.2
Kwetsbaarheid/ Vulnerability	19	12.0	8	5.1	1	0.6	28	17.7
Mitigatie/ Mitigation	9	5.7	9	5.7	-	-	18	11.4
Adaptatie/ Adaptation	14	8.9	18	11.4	-	-	32	20.3
Totaal/ Total	85	53.8	66	41.8	7	4.4	158	100



Grafiek A: Data beschikbaarheid status naar IPCC gebied voor de Global Set van Klimaatverandering Statistieken en Indicatoren, 2023

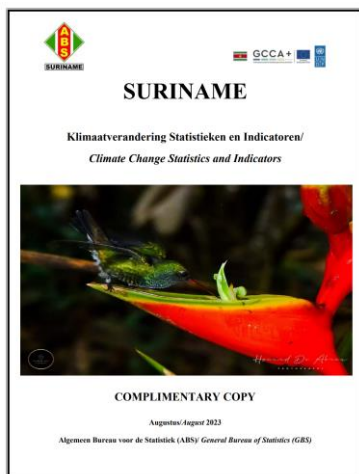
Graph A: Data availability status by IPCC area for the Global Set of Climate Change Statistics and Indicators, 2023

## GLOBAL SET OF CLIMATE CHANGE STATISTICS

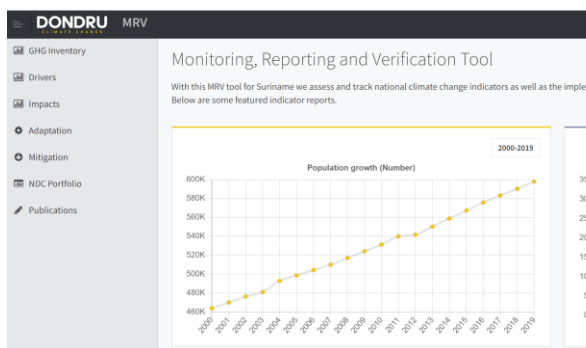
Indicator	Statistics	Themes	Data
<b>DRIVERS</b>			
per year (SDG 13.2.2) house gases land use, land use change and forestry from the national economy ipita ross fixed capital formation of direct value added of foreign controlled	1	Total emissions of direct greenhouse gases (excluding LULUCF)	yes
		Equivalent to the indicator	no
		Equivalent to the indicator	yes
		Equivalent to the indicator	no
	1	Total emissions of direct greenhouse gases (excluding LULUCF)	yes
		Equivalent to the indicator	no
	1	GHG emissions in output of foreign-controlled multinational enterprises	no
	2	GHG emissions in exports of foreign-controlled multinational enterprises	no
		Equivalent to the indicator	no
	<b>use gases</b>		
	Equivalent to the indicator	GHG conc.	yes
<b>ition</b>			
from fossil fuels uels y supply pita terms of primary energy and gross	1	Total energy production	yes
	1	Total energy supply	yes
	1	Total energy supply from fossil fuels	yes
	2	Total energy supply	yes
	1	Final energy consumption (FDES 2.2.2.c)	yes
	2	Total energy supply (FDES 2.2.2.b)	yes
<b>roduction and consumption) per unit of c.1)</b>			
	1	Fossil fuels production	yes
	2	Fossil fuels imports	yes
	3	Fossil fuels exports	yes
	Refer to original source in metadata		no
<b>ulation)</b>			
	1	Population	yes
	2	Population living in urban areas (FDES 5.1.1.a)	yes
<b>s per capita</b>			
	1	Number of private and public vehicles	yes
	2	Vehicle miles traveled	no

## APPLICATION OF CISAT IN SURINAME (2)

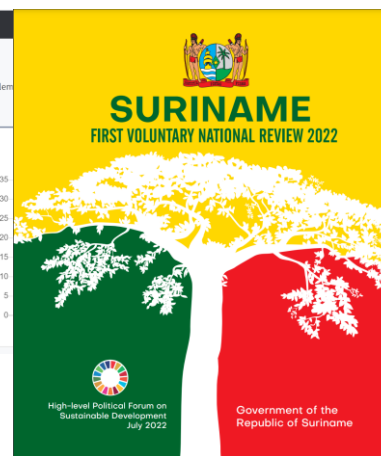
- Even if the CISAT is not completed in full, the GBS achieved or contributed to several important outputs, namely:
  - contribution to the 3<sup>rd</sup> National Communication to UNFCCC (on GBS and UNFCCC websites)
  - the publication of the first ‘Climate change statistics Report’, endorsed by the Minister of ROM (on GBS and UNSD websites)
  - contribution to the VNR (Chapter 13 on Climate action, on GBS and UN website).



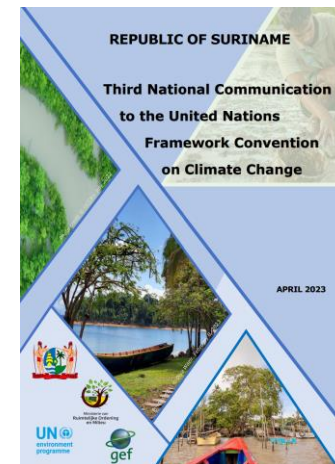
[https://statistics-suriname.org/wp-content/uploads/2023/08/First-Suriname-CC-report\\_21-aug23-Climate-Change-Statistics-and-Indicators.pdf](https://statistics-suriname.org/wp-content/uploads/2023/08/First-Suriname-CC-report_21-aug23-Climate-Change-Statistics-and-Indicators.pdf)



<https://dondru.sr/mrv>



<https://statistics-suriname.org/wp-content/uploads/2022/08/VNR-2022-Suriname-Report.pdf>



[https://unfccc.int/sites/default/files/resource/SURINAME%20NC3\\_2023\\_FINAL.pdf](https://unfccc.int/sites/default/files/resource/SURINAME%20NC3_2023_FINAL.pdf)



Tenth Meeting of the Expert  
Group on Environment Statistics  
Wednesday, 4 October 2023



**Thank you!**

Climate Change and Environment Statistics Unit  
ECLAC Statistics Division

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# Questions for group-work:

- 1. Overall question: Who has used the CISAT and how did it help; what are the key challenges?**
- 2. How to make CISAT more applicable and more user-friendly?**

**Prioritized questions from Survey on ‘State of the implementation of the Global Set of Climate Change Statistics and Indicators’, we need to discuss:**

- Is the question clear?**
- Would you suggest any modifications to the current question?**



# Questions for group-work 1/7

**Have stakeholders been engaged and has a self-assessment been completed using the Climate Change Statistics and Indicators Self-Assessment Tool (CISAT), or other assessment tool?**

(Yes/No; please describe and specify main challenges).

Ref. CISAT: <https://unstats.un.org/unsd/envstats/Climate%20Change/cisat.cshtml>

Environment Statistics Self-Assessment Tool (ESSAT): <https://unstats.un.org/unsd/envstats/fdes/essat.cshtml>



# Questions for group-work 2/7

**Has a national set of climate change indicators (consistent/complementary with Nationally Determined Contribution/ National Adaptation Plan/ National Communications) and metadata been developed?**

(Yes/No; please describe and provide links/ references as applicable, please specify if the Global Set of Climate Change Statistics and Indicators and the CISAT were used).



# Questions for group-work 3/7

**Have data sources been mapped and has data quality been assessed?**

(Yes/No; please describe).



# Questions for group-work 4/7

## Have data gaps been defined and has work been prioritized on methods for data collection?

(Yes/No; please describe also if new data collection instruments such as climate change surveys) been developed).





# Questions for group-work 5/7

## Have you disseminated statistics and indicators on climate change?

(Yes/No; please describe and provide links/ references as appropriate; also please specify in what form (e.g. hard copy, electronically) and is it part of an environment statistics publication/ yearbook/ compendium)



# Questions for group-work 6/7

## Has a validation workshop with stakeholders been organized?

(Yes/No; please describe).



# Questions for group-work 7/7

## Have priorities for future improvements been evaluated and defined?

(Yes/No; please describe).





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