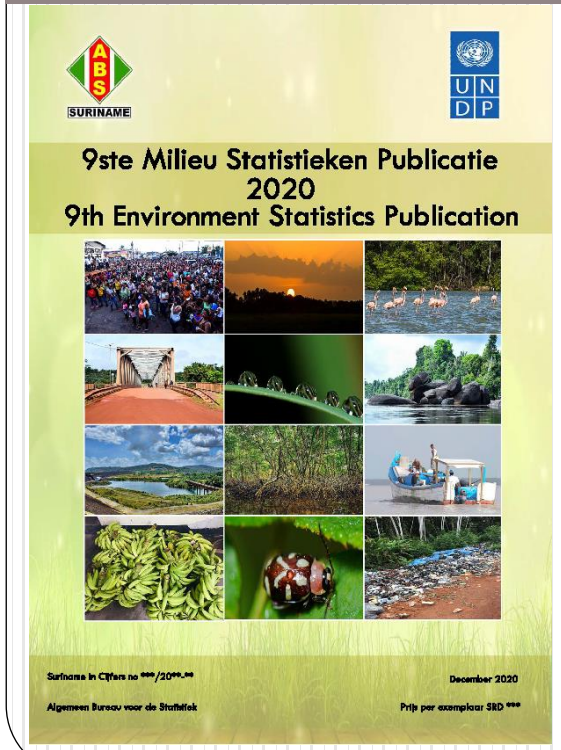
Suriname's experience with Climate Change Statistics



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ABS
SURINAME

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1.Experience with set of Climate Change statistics and indicators

- First Introduction to the draft set of CC statistics and indicators was at the 4th EGES in 2017. It was also part of one of the working group sessions from last two EGES meetings.

- Due to the length and the complexity of first draft it took about 5 days to fill out the first of many versions of the questionnaires where a lot of data gaps were found.

- After collaboration with UNSD, many revisions were made after understanding some of the columns better.

- In early 2020 GBS completed the UNSD Pilot Survey on CC Statistics and Indicators.

2. Advantages of GBS regarding the CC set

- There is good collaboration between the NSO and the Environment Stakeholders, which has only improved while discussing this Pilot Survey of CC Statistics and Indicators.

- In August 2020, a selected group of stakeholders was introduced to the draft CC framework. In December 2020 GBS launched their 9th Environment Statistics publications, that contain circa 41% of the statistics and indicators from the draft set of CC framework scattered in various chapters.

- The FAO has ongoing projects with the Foundation for Forest Management and Production Control regarding forest data. Most of the SDG goal 15 indicators (Forest indicators) have data. The UNDP also has various projects that are Environment Related and related to Climate Change.

- Suriname did 2 GHG-Inventories (Suriname National Communication in 2003 and 2008). Suriname is now at the stage of preparing for the third GHG-Inventory using the IPCC guidelines. GBS provided some data to the local consultants responsible for this 3th UNFCCC report.

3.Challenges of GBS regarding CC set during Pilot

- It was sometimes difficult to know what the indicator actually measured or what statistics were needed to compile the indicator.

- There was data available on several statistics, but not a lot on the indicators from the CC Pilot Survey. For example: for the indicators, Freshwater resources & Freshwater abstraction, supply and use (data only available on some statistics needed to calculate the indicator: Average Annual and Monthly Precipitation & Drinking Water production). This is the case for many of the CC indicators.

- There is lack of data in Suriname on topics regarding quality such as: Water quality, Air quality and -Soil quality Indicators. (Specialized surveys are needed)

- Of the 134 indicators from the Pilot CC set, there was a data gap for 51 CC indicators/statistics at the NSO and 10 of the indicators were not applicable for Suriname (circa 41% data gaps).

- Existing Climate Change data needs to be updated. The latest data available is from 2008 from the second UNFCCC. (Consultants are busy with the updates).

4a.Data gaps : Drivers & Impacts

- **Drivers:**

- Energy consumption *(Energy intensity measured in terms of primary energy and GDP).*
- Emissions of GHGs by sector *(Emissions of GHGs from waste).* Data on wastewater treatment is very hard to collect in Suriname.
- Fossil fuels *(Fossil fuels extraction Fossil fuels imports Fossil fuels exports Share of fossil fuels in total primary energy supply).*

- **Impacts (data gaps 13):**

- Areas impacted by climate change *(Reduction of water bodies surface).*
- Water quality *(Water turbidity, Water pH, Average marine acidity (pH) measured at agreed suite of representative sampling stations, BOD of water resources & COD of water resources).*
- Hazardous events and disasters *(Migrant and displaced persons by climate change associated disasters).*
- Soil condition *(Reduction of carbon stock in soil Area affected by soil erosion)*
- Distribution and status of species *(Climate change impacts on species abundance, Number of species affected by climate change).*
- Climate change impacts on transport and tourism *(Impacts of climate change on transport Impacts of climate change on tourism).*

4b.Data gaps : Vulnerability & Mitigation

- **Vulnerability (8 data gaps):**

- Food security *(Prevalence of undernourishment Vulnerability of food resources to climate change).*
- Buildings and infrastructure vulnerable to climate change *(Proportion of infrastructure vulnerable to climate change Proportion of buildings (settlements) vulnerable to climate change).*
- Vulnerable population *(Proportion of population living in other (than coastal) hazard-prone areas Proportion of urban population living in slums, informal settlements or inadequate housing Proportion of population with disability).*
- Vulnerable area of country to climate change *(Water bodies vulnerable to climate change impacts).*

- **Mitigation (7 data gaps):**

- Climate change mitigation policies, strategies and plans *(Low carbon development strategies and plans Climate change mitigation expenditures Share of energy and transport related taxes as percentage of total taxes and social contributions External funding for climate change mitigation Average trading carbon price).*
- Climate change mitigation technology and practice *(Climate change mitigation technology GHG intensity of economic activities (including transport) &Progress towards GHG emissions reduction target).*

4c.Data gaps : Adaptation (18 gaps)

- Climate change adaptation policies, strategies and plans *(Existence of National Adaptation Plans Share of government adaptation expenditure in relation to GDP).*
- Risk management, disaster forecasting and early warning systems *(Resources for risk management and response, Existence and number of early warning systems, Insurance costs related to climate change).*
- Climate change public awareness and education *(Existence and number of information systems on climate change, Climate change-related education and training programmes).*
- Climate change adaptation management and practice *(Area covered by storm surge defense infrastructure, Proportion of buildings adapted to climate change, Share of green urban areas in the total area of cities, Number of climate change related personnel, Number of institutions involved in climate change adaptation, Number of scientific papers and reports on climate change, Proportion of degraded area of ecosystems which has been restored, National ICZM in place).*
- Climate change monitoring *(Air quality monitoring systems & Water monitoring systems).*
- Waste management *(Proportion of municipal waste treated)*
- Water management and treatment *(Proportion of wastewater treated).*

5.Contribution to revised structure of draft Global Set of CC Statistics and Indicators

- In 2020 (Feb-Sept.) GBS was invited to contribute to the revision of the Pilot Survey based on its experience and worked closely with UNSD and other countries in preparation for the 7th EGES held in November 2020 and the Global Consultation.

- The small group reviewed all indicators and one main advancement was to decide to separate the indicators and statistics into two columns to provide:
  - More distinction between an indicator (proportion, change, ratio etc.) and a statistic.
  - Clarity and transparency on what are the underlying statistics needed to produce an indicator as sometimes indicators disguise what is actually needed for their compilation.
  - An opportunity for all countries to at least identify and assess the statistics needed for an indicator, in the event that they can't compile the indicator itself due to lack of data.

  - In November 2020, GBS participated in the 7th EGES and also contributed to the revised Global set of CC statistics and Indicators.

7. Relation national CC global set with Suriname Environment Statistics (1)

	Chapter Env Stat Pub.	Drivers	Impact	Vulnerabilty	Mitigation	Adaptation	Total
1	Demographic and Socio-economic Background			2			2
2	Climate & Natural Disaster		9			3	12
3	Tourism						0
4	Transport	1		1			2
5	Environment and Health		1	1			2
6	Water		2	1		1	4
7	Energy & Mineral	10			2		12
8	Forestry		7	1	1	4	13
9	Coastal Marine Resources		2	1		1	4
10	Land Use and Agriculture		3	1		2	6
11	Biodiversity		3	2	1		6
12	Air	6				1	7
13	Waste			1		1	2
Data available in Env. Stat pub		17	27	11	4	13	72

- Although Suriname did not publish a CC statistics Report yet, some of the CC indicators and Statistics are collected and compiled in the Environment Statistics publication.
- There are many data gaps, and to try to collect more data, there needs to be more collaboration between GBS and the stakeholders, especially the policy focal points working on Climate Change.
- There is more data available on Statistics, than on the indicators (see next slide)

	CC indicators/Statistics	CC	1	2	3	4	5	6	7	8	9	10	11	12	13	ES
1	**DRIVERS**	**20**														17
a	Total greenhouse gas (GHG) emissions	2												2		2
b	Atmospheric concentration of greenhouse gases	1												1		1
c	Emissions of GHGs by sector	4												3		3
d	Energy production and supply	2							2							2
e	Energy consumption	3							3							3
f	Electricity	3							3							3
g	Fossil fuels	4							2							2
h	Transport	1				1										1
2	**IMPACTS**	**48**														27
a	Agricultural production impacted by climate change	2										2				2
b	Areas impacted by climate change	7								2	1	1				4
c	Freshwater resources	1		1												1
d	Freshwater abstraction, supply and use	1						1								1
e	Water quality	7		1				1								2
f	Hazardous events and disasters	4		3												3
g	Climate change and human health	2					1									1
h	Climate change evidence	7		3												3
i	Soil condition	2														0
j	Distribution and status of species	5											3			3
k	Distribution and status of ecosystems	7		1						4	1					6
l	Production and consumption of materials	1								1						1
m	Climate change impacts on transport and tourism	2														0
3	**VULNERABILITY**	**24**														11
a	Food security	2														0
b	Vulnerable ecosystems and their services	2											2			2
c	Buildings and infrastructure vulnerable to climate change	2														0
d	Vulnerable population	13	2			1	1	1							1	6
e	Vulnerable area of country to climate change	5								1	1	1				3
4	**MITIGATION**	**12**														4
a	Renewable energy	2							2							2
b	Climate change mitigation policies, strategies and plans	5														0
c	Climate change mitigation technology and practice	5								1			1			2
5	**ADAPTATION**	30														13
a	Climate change adaptation policies, strategies and plans	3												1		1
b	Risk management, disaster forecasting and early warning systems	4		2												2
c	Climate Change public awareness and education	2														0
d	Climate change adaptation management and practice	13								3	1	2				6
e	Climate change monitoring	4		1						1						2
f	Waste management	2													1	1
g	Water management and treatment	2						1								1
	Total	134	2	12	0	2	2	4	12	13	4	6	6	7	2	72

8.Way forward for Suriname

- Try to collect more data on CC for the 10th Environment Statistics publication, planned for 2022.
- Provide as much data that is available at the NSO for the consultants responsible for Suriname's 3rd National Communication.
- Collaborate more with the national climate change focal point to promote linking climate change monitoring, statistics and policy, as well as to benefit from funding from the Green Climate Fund (GCF).
- Preferably this year, but latest 2022, publish a climate Change Statistics Report for Suriname.
- Participate in the UNSD Global Consultation on Climate Change Statistics and Indicators.

Questions

- Have other countries been able to set up collaborative mechanisms, such as inter-agency working committees on climate change (or environment) statistics to facilitate data coordination and reporting

- How have countries overcome some of the data gaps especially in the area of adaptation?

- Have countries been able to obtain funding to carry out activities regarding climate change statistics, and what are some of the positive experiences?

THE END