



FRAMEWORK FOR THE DEVELOPMENT
OF ENVIRONMENT STATISTICS
(FDES 2013)



Environment & Climate Change Statistics in Suriname

Name : Mrs. Anjali De Abreu-Kisoensingh, MSc.
Institute : General Bureau of Statistics (ABS)
Place : Chile, ECLAC
Date : 23th August 2022

CONTENT

- 1 : Objective Environment Statistics (ES) compendium
- 2a : Guidelines ES compendium
- 2b : Global Set on Climate Change Statistics and Indicators
- 3 : Data collection process
- 4 : Data availability
- 5a : Data sources
- 5b : Stakeholders
- 6 : Chapters/Tables/Graphs/Figures (2002-2021)
- 7 : Challenges & Weaknesses
- 8 : Opportunities & Strengths
- **10** : Suriname's First VNR- chapter 13
- 11 : Dondru database
- **12** : Lessons learned
- 13 : Recommendations

1. Objective Environment Statistics (ES) compendium

- ❑ Provide environment data on different subject areas and from different sources.
- ❑ Contribute to a solid basis for decision -making, to monitor development and to promote public awareness.
- ❑ Impetus for research (National, Regional & International).
- ❑ Comply with national, regional and international obligations /treaties (CARICOM, ECLAC, UNSD & SDGs).
- ❑ Maintain publication rhythm and awareness.

2a: Guidelines

❑ **CARICOM CORE SET** (12 sectors and 61 indicators). Circa 69% data available.

❑ **UNITED NATIONS STATISTICS DIVISION: FDES 2013 Framework for the Development of Environment Statistics**

(6 components, 21 subcomponents and 458 indicators). (circa 52% data available)

(<http://unstats.un.org/unsd/environment/FDES/FDES-2015-supporting-tools/FDES.pdf>)

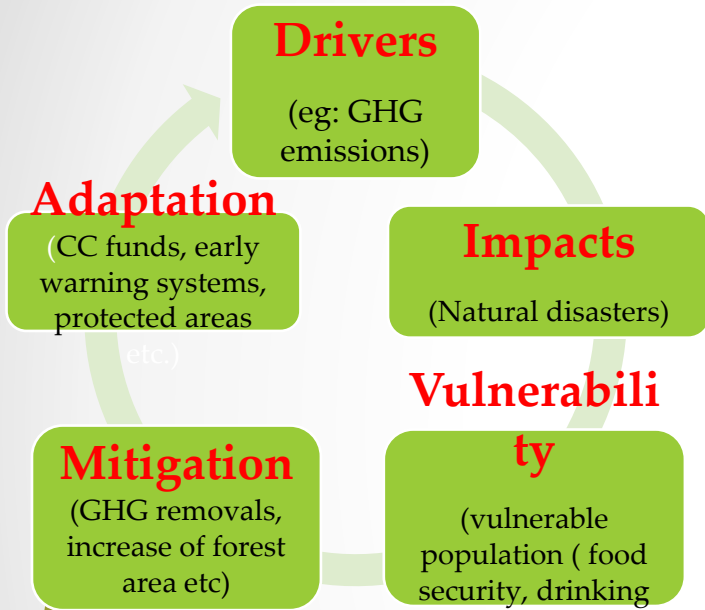


❑ **UN: Sustainable Development Goals (SDG)**. Circa 37% data available of the 84 Environment related SDGs (selected indicators from SDG 2,3,8,9 and all from SDG 6,7,11,12,13,14 en 15).

❑ **UNSD: Global Set on Climate Change Statistics and Indicators** (Adopted in March 2022) (5 IPCC area with 158 Indicators)- see next slide for more info.



2b. Global Set on Climate Change Statistics and Indicators



Five (5) IPCC areas

	Environment Statistics Chapters	Drivers	Impacts	Vulnerability	Mitigation	Adaptation	# Indicators
1	Demographic and Socio-Economic Background	3		3		1	7
2	Climate & Natural Disasters		8	1		1	10
3	Tourism		1				1
4	Transport	1					1
5	Environment and Health		2	2			4
6	Water		1	2		1	4
7	Energy & Minerals	5		2	4		11
8	Forestry	2	3		1	1	7
9	Coastal and Marine Resources		1			2	3
10	Land Use and Agriculture	3	2	2		1	8
11	Biodiversity		2	2		1	5
12	Air	5	1	1	4	2	13
13	Waste			1		1	2
Total indicators Environment comp.		19	21	16	9	11	76
Total indicators global framework of CC		26	54	28	18	32	158
% Preliminary Data available per June 2022		73%	38.8%	57.1%	50%	43.8%	48.1%

- The 10th Draft ES compendium contained circa 48.1% available statistics.
- **Note:** For some of the Indicators, there is data available for a proxy indicators

3: Data collection process

Period	January/February 2022	March-August 2022	19 August 2022
Activity	<ul style="list-style-type: none"> • Prepare the data request letters. • Update the contact information of the stakeholders. • Send the first data request letters to circa 50 stakeholders. • Sending kindly reminders to provide the requested data. 	<ul style="list-style-type: none"> • Analyze data for the 10th Zero draft Environment Statistics compendium. • Compile data from the 10th Zero draft Environment Statistics compendium for the First Climate Change Statistics and Indicators compendium using the global set as the main guideline. 	<ul style="list-style-type: none"> • Hosted a successful workshop where Zero draft ES compendium was validated and all the 158 indicators of the UNSD Global set of Climate Change Statistics and Indicators were introduced and discussed upon data availability and new stakeholders GBS could contact for more information.
Period	August- September 2022	October- November 2022	December 2022
Activity	<ul style="list-style-type: none"> • Send second data request letters to new stakeholders recommended at the workshop. • Ask stakeholders to verify the data/text they provided before the workshop. 	<ul style="list-style-type: none"> • Analyze verified data • Screen the text (Dutch & English) • Lay-out publication. • Prepare the launch of the compendium. 	<ul style="list-style-type: none"> • Launch the 10th Environment Statistics compendium • Launch the first Climate Change Statistics and Indicators compendium.

4. Data availability

- ❑ The 10th compendium contain data for the period 2017-2021. For the previous years, reference is made to the previous 9 publications (2002, 2006, 2008, 2010, 2012, 2014, 2016, 2018, 2020). Some data, which have already been published in the 9 publications are not included because of the fact that they have remained unchanged.
- ❑ A number of data gaps still exists and work is being prepared to make some of these gaps in the (close) future a thing of the past.
- ❑ De last 5 ES-publications (2020, 2018, 2016, 2014 and 2012) are available on the GBS website and also on the Unites Nations website
- ❑ https://www.statistics-suriname.org/wp-content/uploads/2019/03/revised-FINAL_Milieupub_6dec2018-txs-Suriprint.pdf



5: Chapters, Tables/Graphs & figures (2002-2020)

Relevant Indicators of the ES compendium																					
Chapter	Topics (13)	Tables										Graphs & figures									
		1 ^e	2 ^e	3 ^e	4 ^e	5 ^e	6 ^e	7 ^e	8 ^e	9 ^e	10 ^e as of Aug 22	1 ^e	2 ^e	3 ^e	4 ^e	5 ^e	6 ^e	7 ^e	8 ^e	9 ^e	10 ^e
		1995-2000	1999-2003	2000-2006	2004-2009	2008-2010	2009-2013	2011-2015	2013-2017	2015-2019	2017-2021	1995-2000	1999-2003	2000-2006	2004-2009	2008-2010	2009-2013	2011-2015	2013-2017	2015-2019	2017-2021
1	<i>Demographic and Socio-economic Background</i>	4	4	6	5	5	17	13	13	28	21	.	.	2	1	2	6	4	7	10	9
2	<i>Climate and Natural Disasters</i>	7	4	5	5	5	8	12	14	26	23	.	1	1	2	2	2	2	3	11	10
3	<i>Tourism</i>	6	9	5	4	5	9	7	7	19	7	.	3	4	4	4	4	4	4	4	3
4	<i>Transport</i>	3	4	5	9	7	8	10	11	19	19	.	.	1	3	1	4	4	5	8	6
5	<i>Environment & Health</i>	9	9	4	8	8	11	7	8	21	14	.	1	0	.	.	7	3	4	8	6
6	<i>Water</i>	4	6	10	8	4	18	18	20	37	23	.	1	1	1	1	8	3	3	7	5
7	<i>Energy and Minerals</i>	8	6	10	14	19	20	26	27	41	34	.	3	4	5	5	8	8	14	14	9
8	<i>Forestry</i>	6	4	7	8	7	13	13	17	21	18	.	1	1	1	1	3	1	3	13	8
9	<i>Coastal and Marine Resources</i>	3	5	5	5	4	8	9	8	11	11	.	.	1	1	1	2	1	2	2	3
10	<i>Land Use and Agriculture</i>	4	6	4	5	5	12	10	11	18	17	.	.	1	1	1	4	4	6	8	5
11	<i>Biodiversity</i>	5	5	6	4	3	26	33	29	35	32	.	.	0	.	.	2	3	6	13	17
12	<i>Air</i>	6	3	.	.	.	15	4	5	6	7	.	.	0	.	.	6	3	2	3	4
13	<i>Waste</i>	.	.	.	.	.	7	5	7	13	15	.	.	0	.	.	2	3	4	5	4
	Total	65	65	67	75	72	172	167	177	295	241	.	10	16	19	18	58	43	63	106	89

6a. Data sources (1)

Administrative data.

- ✓ Data is received mostly in Excel or Words via email. More that 80% of the data compiled is administrative data.

Surveys and Census data.

- ✓ In the 9th ES compendia MICS 2018 data provided a lot of information on access to drinking water, good sanitation (SDG 5) and electricity and clean energy (SDG 7). Also some info about the dwellings (material of dwelling, number of rooms etc.)
- ✓ The GBS continuous household survey contains data about “materials (roof, outer walls, floors) for dwelling, household size, status of the dwellings, dwelling ownership and number of rooms.
- ✓ Census data also contains data on households who have access to basic needs like water, sanitation, electricity and waste disposal.

6a. Data sources (1)

Data produced by GBS or compiled in GBS reports.

Economic data:

✓ CPI sheet, national accounts (GDP & real economic Growth), exchange rates and Financial Nota data.

Social data:

✓ Mid-years estimates, household size etc.

Customs data (Import and export data extracted from the ASYCUDA database)

✓ Batteries/accus, water, pesticides, animals and plants, e-waste etc.)

Traffic and Transport data:

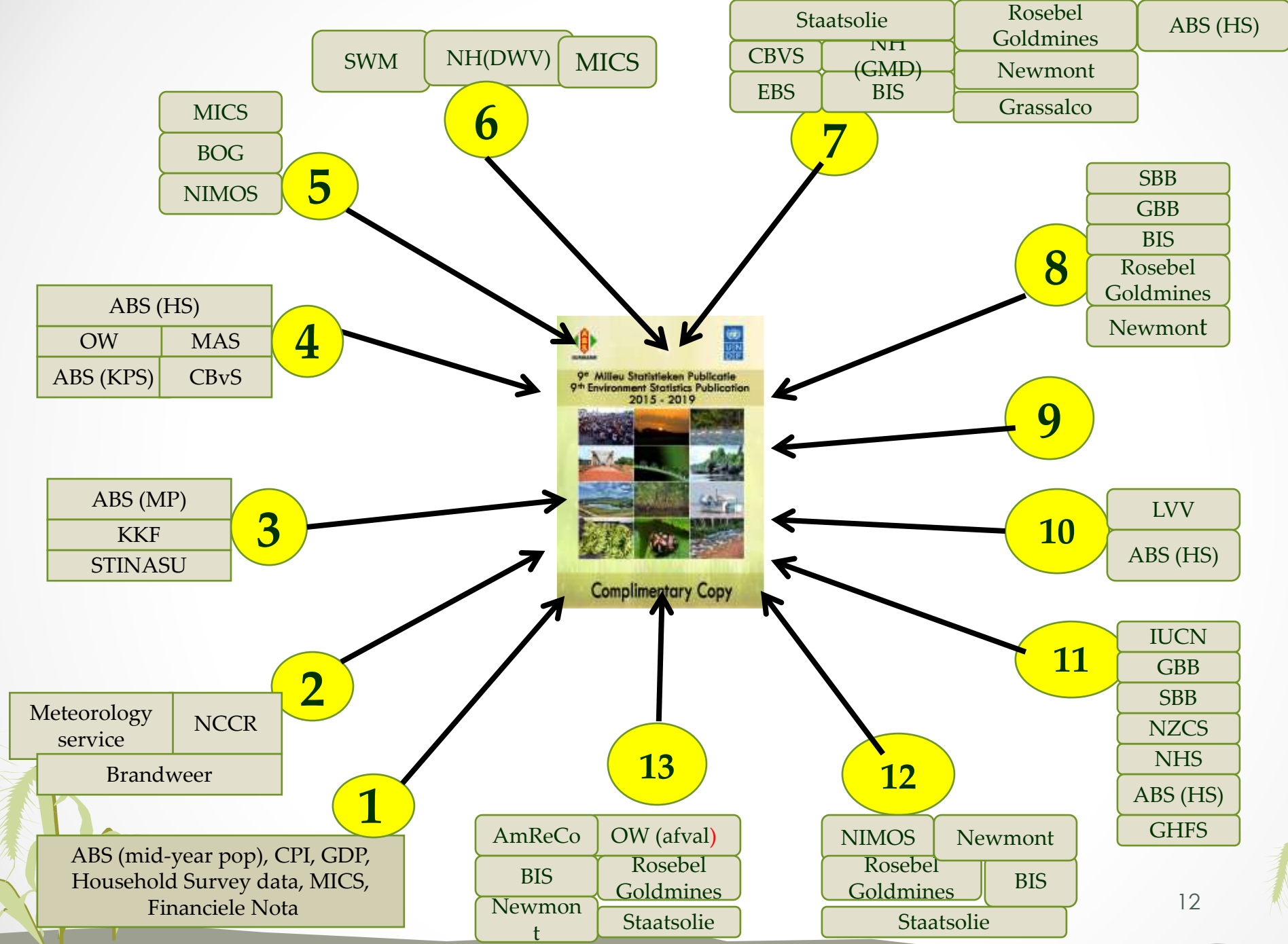
- Number of Insured vehicles, by type of vehicle

- Tourist data: Number of arrivals and departures by nationality

- Number of deaths due to car accidents by age, gender and location (SDG 3)

6a. Data sources (3)

- GIS data (see page 12 & 13)
- ✓ Example : SBB provides GBS with updated Land use and Land Cover Maps (LULC), maps of deforestation, Protected areas etc., logging Areas etc. They have a lot of experience working with Satellite images. Go to the gonini website: <https://www.gonini.org/> or the Kopi database <https://kopi.sbb.sr/>
- Policy/ratified conventions, regulations and Acts/ laws to protect the environment.
- Data from books about Suriname: For example books on Suriname's biodiversity, or studies done by the University or other researchers.
- Other national, regional and international Reports that contain official data about Suriname : like FAO, IDB, UNFCCC etc.
- Websites/ databases/ repositories etc.
- ✓ climate change knowledge database Suriname “ Dondru” (<https://dondru.sr/>)



7.Challenges / Weaknesses

- ❑ Since March 2020, the COVID-19 Pandemic hit
- ❑ The GBS relies on administrative data, which can result in lower data quality or even no data for some years due to staff turn over.
- ❑ The statistical capacity at the government needs to be enhanced/increased through more training especially in the metadata to better understand the FDES 2013, Climate Change and SDG indicators and to be able to calculate the indicators themselves.
- ❑ Data collection is time consuming. Stakeholders need to be reminded constantly via email/phone or even through personnel visits. This got even worse with the COVID-19 pandemic.
- ❑ Some of the national data is not processed in the required format, or is not disaggregated or is out of date (lack of data by Gender & District).
- ❑ Due to Lack of Financial and human resources specialized surveys can not be conducted.

8. Opportunities /Strengths (1)

□ GBS has a good collaboration with the government, private sector and international organizations (UNDP).

□ The Environment Statistics workshop and launch

✓ Since 2014, Every two years an environment statistics workshop is organized by GBS in collaboration with UNDP, (before 2014 it was funded by Conservation International Suriname CIS)), where the Zero draft Environment compendium is validated and feedback is proved during working group sessions. The participants also get familiar with the various international Environmental frameworks such as the FDES, SDGs, CARICOM core set. Furthermore the launch and the complimentary copies of the compendiums are also funded by the UNDP.

□ August 19th GBS introduced the Global set of Climate Change Statistics and Indicators at the 10th Draft Environment statistics publication workshop.

8. Opportunities /Strengths (2)

□ GBS participates in many (national, regional and international) Environment statistics and Climate Change workshops and meetings (either virtual and/or physical). In Suriname, the Ministry of Spatial Planning and Environment and other ministries/institutes invite the NSO to workshops that helps us understand the data they provide to us. It also helps to understand the various conventions the country ratified or projects the ministries are doing (linking data with Environmental policy).

□ Since 2016, GBS is a member of the Expert Group on Environment Statistics (EGES) and contributed actively to the Global set on Climate Change Statistics and Indicators since 2020.

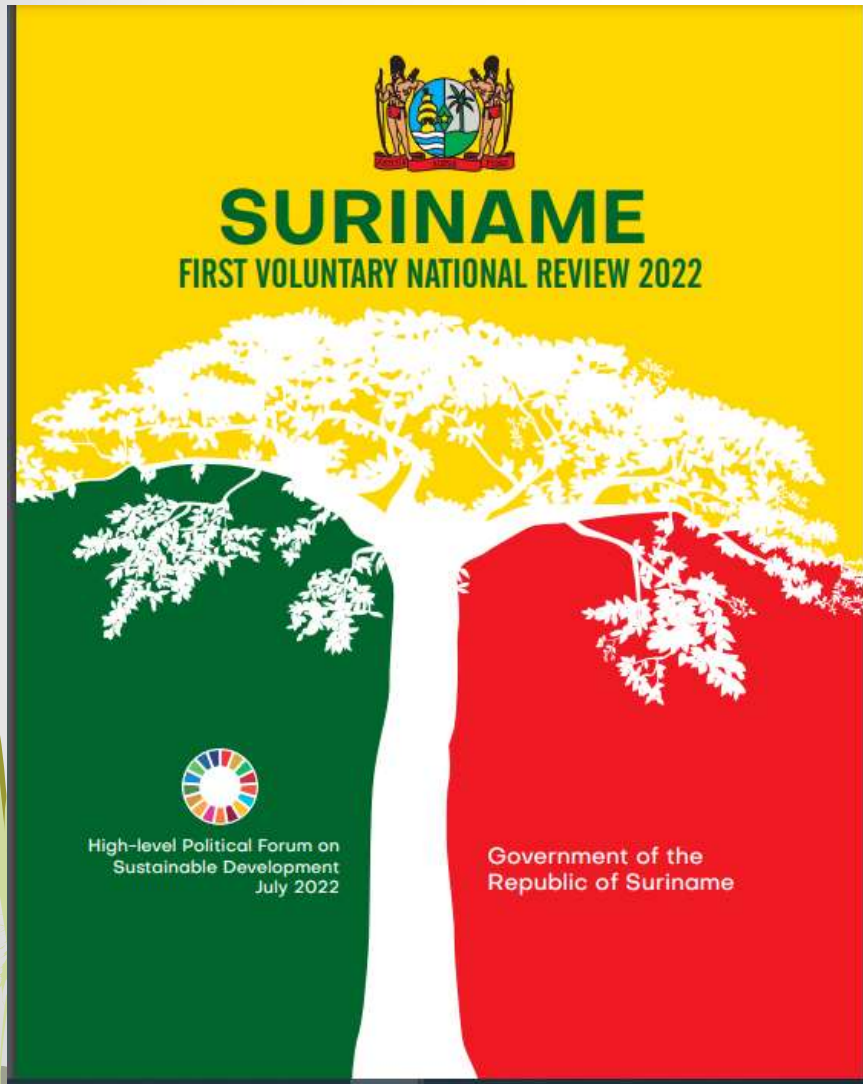
□ Since 2017, GBS is a member of the CARICOM Technical Working Group on Environment Statistics and the CARICOM Technical Working Group on SDGs and contributed to the CARICOM CORE SET of SDGS.

□ Technical assistance and training received through participation in various national, regional (CARICOM & ECLAC) and international (UNSD/UNFCCC/FAO etc.) Climate Change and Disasters workshops/meetings.

8. Opportunities /Strengths (3)

- GBS is also part of SMIN “Suriname Environmental Information Network”, that is also mentioned in the Environment Framework act that was approved in 2020.
- ❑ GBS has experience with the SDGs and started collecting data since 2016.
- ✓ In 2022, GBS was part of the Voluntary National Report (VNR) commission that submitted Suriname’s First VNR report in June 2022 and reported on SDG 4,8,13 and 17. GBS contributed mostly with data and drafting the chapter on SDG 13 “Climate Change”. GBS is also part of the SDG commission.
- ✓ Since June 2022, Suriname has Climate Change knowledge Database Suriname where data from the Environment Statistics compendium was used (see next slide).

10. Suriname's First VNR- chapter 13



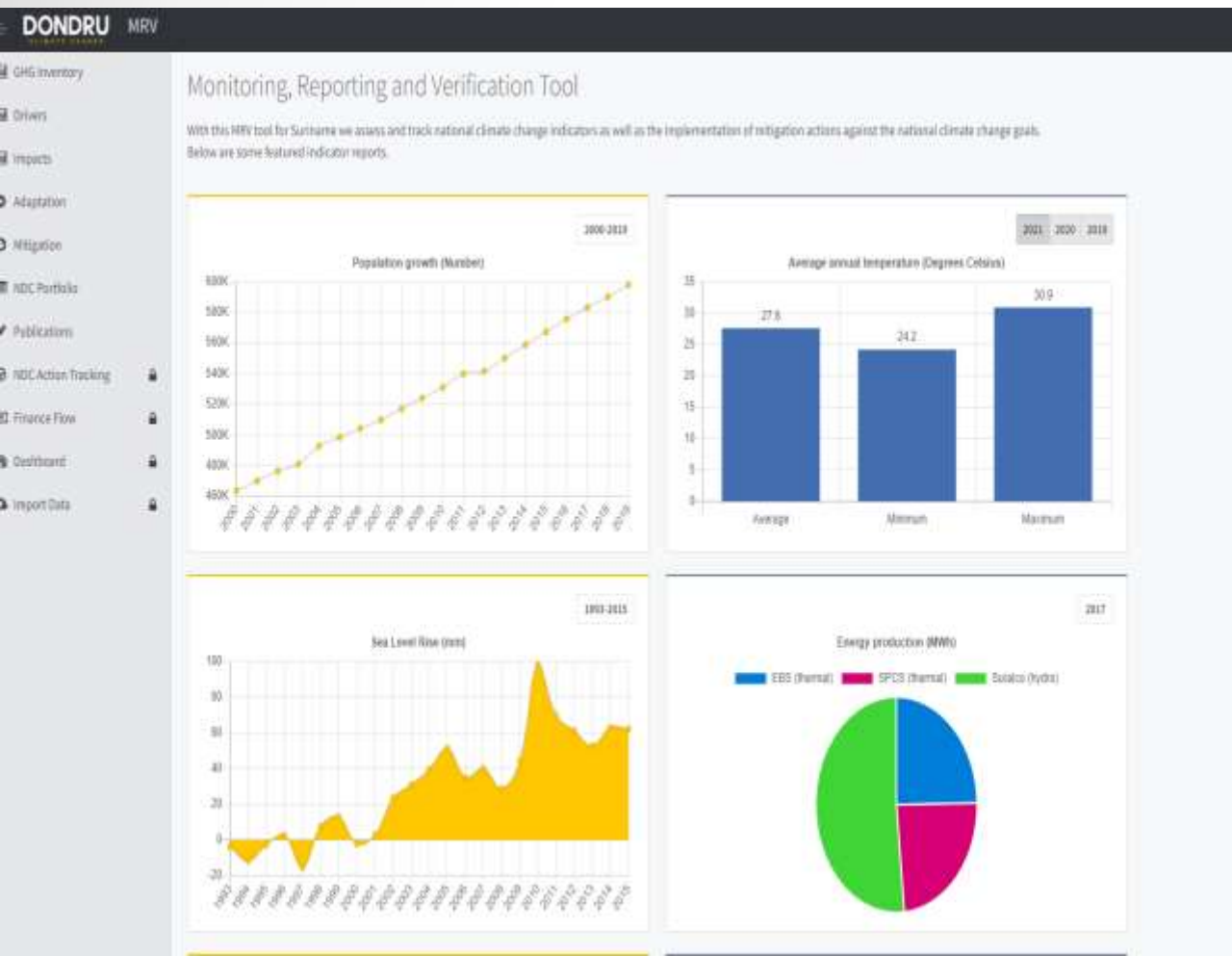
7.1 STATUS OF THE TARGETS

SDG 13 Targets	Status
13.1: Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries	On track
13.2: Integrate climate change measures into national policies, strategies and planning	On track
13.3: Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning	On track
13.a: Implement the commitment undertaken by developed-country parties to the United Nations Framework Convention on Climate Change to a goal of mobilizing jointly \$100 billion annually by 2020 from all sources to address the needs of developing countries in the context of meaningful mitigation actions and transparency on implementation and fully operationalize the Green Climate Fund through its capitalization as soon as possible	Moderate improvements
13.b: Promote mechanisms for raising capacity for effective climate change-related planning and management in least developed countries and small island developing States, including focusing on women, youth and local and marginalized communities	On track

On track ■ Moderate improvements ■ Not on track ■ Not monitored yet ■

11. Climate Change knowledge Database (Dondru (thunder) database)

- <https://dondru.sr/>



DONDRU

ABOUT US MRV PROJECTS PUBLICATIONS

MONITORING, REPORTING AND VERIFICATION TOOL

With the MRV tool we assess and track the implementation of mitigation actions including the status of implementation and progress achieved against the national climate change goals

GO TO MRV

PROJECTS

The following climate change related projects are ongoing now

12: Lessons learned

- ❑ Quality and availability of data is the most critical issue.
- ❑ Human, Technical and Financial resources are scarce.
- ❑ Environment Statistics and Climate Change statistics should be a priority issue for the Government otherwise reporting will remain as ad hoc actions.
- ❑ There is a need for more technical capacity (training in the metadata & data collection process) for the FDES Environment Indicators, Climate Change Indicators and SDG indicators.

13: Recommendations

- ❑ Start publishing a small set of indicators (2-3 indicators per Topic/ IPCC area) in an Environment Statistics or Climate Change compendium using the FDES, SDGs and the Global Set of Climate Change Statistics and Indicators.
- ❑ Ask for technical assistance (data collection & metadata training) from international organizations (UNSD, ECLAC, CARICOM etc), to better understand the FDES, the SDGs and Global set on Climate Change Statistics and Indicators.
- ❑ Collaborate with the Ministry of Environment and other core ministries in your country.
- ❑ Collect all Climate Change related reports that your government submitted. Check if your country submitted a national communication. These reports contain a lot of data, that are also indicators from the Global Set.

BEDANKT
Thank You
Gracias
Merci Beaucoup

