



### LETTER OF ADVICE

To the Honorable Caretaker Ministers of the Government of Sint Maarten The Prime Minister/Act. Minister of General Affairs, Mr. Wycliffe Smith The Minister of Education, Culture, Youth and Sports Mr. Wycliffe Smith The Minister of Finance/Act. Minister of Justice, Mr. Perry Geerlings The Minister of Tourism, Economic Affairs, Traffic and Telecommunication, Mr. Stuart Johnson The Minister of Public Housing, Spatial Planning, Environment and Infrastructure/ Act. Minister of Public Health, Social Development and Labor Mr. Chris Wever

**New Government Building** Soualiga Road #1 Philipsburg Sint Maarten

Philipsburg, October 30th, 2019

Our reference: SER /19/SA/33

Re: Letter of advice: "DATA Matters: The value of data to sustainably transform our society"

Honorable Ministers,

As the Caretaker Government of St. Maarten 1, the Social Economic Council (SER) requests you in your current to capacity to review the following advice. For continuity purposes, please ensure that the Council of Ministers of the incoming government receives this advice for follow-up.

This letter of advice entitled "DATA Matters: The value of data to sustainably transform our society" is an unsolicited advice for the government of Sint Maarten. Assuming its institutional role to strategically advise government on sustainable development and improve the quality of life of citizens, the SER wishes to highlight and underscore the importance of DATA as a valuable contributor to the sustainable social economic development of Sint Maarten.

#### Background

Research has revealed that adopting data-driven decision-making can have 5-6% higher output and productivity, while data-driven innovation can have a significant impact on well-being. Globally, with data having an important economic role in international trade and cooperation, it accounted for US\$ 2.8 trillion (approx. 3.3%) of global GDP in 20142.

See: 'Landsbesluit van 10 oktober 2019 no. LB-19/0735; Landsbesluit van 10 oktober no. LB-19/0736; Landsbesluit van 10 oktober no.LB-19/0737', published in the National Gazette-Special Edition of October 15th, 2019.

<sup>&</sup>lt;sup>2</sup> HM Treasury. The Economic Value of Data: Discussion paper. August 2018.



Conversely, poor data can result in loss of income and productivity with the economy underperforming its real potential. The cost of poor data in the United States of America resulted in a loss of US\$3\$ trillion in 2016 $^3$ . The value of data for agriculture, tourism and education in small economies was estimated to 1% of GDP $^4$ .

Recognizing that the use of data for policy making is an already internationally established norm, the advice 'Data Matters' aims to stimulate data collection and data sharing as an essential priority for effective and informed policy making on Sint Maarten. Given the broad scope and the multilayered nature of the topic, the SER focuses in this advice primarily on data collection, data quality and data sharing with emphasis on data collection and data sharing as an important cornerstone for sustainable development of the island. Also highlighted in this advice is that the data collected must be accurate and of high quality, as skewed data will ultimately produce skewed policies. As such, the SER is of the opinion, backed by research, that accurate data collection and data sharing deserves more attention in determining policy directions as well as in general discussions. Furthermore, the SER focuses on an additional measure to assess and monitor social progress<sup>5</sup> and sustainable development beyond Gross Domestic Product (GDP) which correspondingly requires data collection. Considering the foregoing, the advice begins with an exploration of a variety of social indexes and indicators that can complement the GDP. Based on the elucidation provided on page 3 of this advice, the SER advises the following:

#### Advice:

The SER unanimously advises the government of Sint Maarten:

- To include a comprehensive and multidimensional (social) Index, that incorporates both the Basic Needs Approach (BNA) as well as the capabilities approach (CA), to measure and monitor societal well-being and progress to complement the GDP
- 2. To designate the Department of Statistics (STATS) as a main autonomous entity with greater access to collect essential data needed for statistics
- 3. To increase the awareness of the importance of Data (collection and sharing) via a multi-level community campaign
- 4. To formalize a Data management platform with a legal basis as a tool for data sharing including a multi-annual budget
- 5. To amend the National Ordinance on Statistics and the regulation social economic statistics <sup>6</sup> to reflect points 1 and 2.

<sup>&</sup>lt;sup>3</sup> McKinsey Global Institute. The Age of Analytics: Competing in a Data-Driven World. December 2016.

<sup>&</sup>lt;sup>4</sup> McNaughton M. Making sense of US\$3trillion-Estimating the value of Open Data for Small Economies. Mona Business review: 2015.

<sup>&</sup>lt;sup>5</sup> This also includes social well-being, quality of life, human development etc.

<sup>&</sup>lt;sup>6</sup> In Dutch: Statistieklandsverordening (AB 2013, GT no.450) en Landsbesluit Sociaal-economische statistieken



We trust to have informed you sufficiently herewith.

Should you require any additional information after reading the above, please feel free to contact us at your earliest convenience.

Respectfully,

ir. Damien D. Richardson

Chairman

Gerard M.C. Richardson Secretary General



#### Elucidation

## 1. Measuring Beyond GDP

Internationally, Gross Domestic Product (GDP) is the main metric used to measure a country's growth. GDP is used to monitor productivity, market activity and to gauge how the country, from a macroeconomic perspective, is performing financially. Often times countries are happy to report the increase in GDP and GDP per capita without translating its meaning to the individual level. However, the growth in GDP solely measures economic performance. GDP does not measure inequality, well-being or quality of life and is not a true reflection of the social reality. Focusing on the increase in GDP per capita to determine how the country is doing in general says little about, the environment, education, life expectancy or societal wellbeing on the whole. The global financial crisis of 2008 was a turning point in recognizing the limitations of the use of mainly GDP to measure a country's performance. In the USA for example, while most individuals saw an income decline from the '90s through 2008, the GDP was increasing, painting a different picture of performance<sup>7</sup>. While economic growth is important to monitor, solely looking at economic growth is insufficient as development goes beyond economic performance. Furthermore, measuring and monitoring poverty, well-being, and the quality of life is vital for governments as well as international organizations that need to measure and gauge performance beyond a narrow range of economic indicators. Consequently, there are numerous advances in research by different institutions and individuals, whom have designed alternative measures of a country's performance, which includes the various aspects of human development, quality of life, poverty, the environment, wellbeing and happiness. This has resulted in a wide range of indexes with corresponding indicators. It is not the intention of the SER to address them all, but to highlight the distinct points of departures. These are:

- a) The Subjective approach constitutes the inclusion of subjective views in well-being analysis (e.g. Well-being Index and the Better life Index<sup>8</sup>).
- b) The Goals-based system of indicators such as the Millennium Development Goals (MDGs) and the Sustainable Development Goals (SDGs) encourages a goal setting exercise with a range of targets.
- c) The Sustainability indicators can be divided in composite indexes; physical environmental indexes and green national accounts (e.g. Environmental Sustainability Index).
- d) **The Comprehensive Indexes** such as the Social Progress Index (SPI), provides a framework for measuring social progress that is independent of GDP and complementary to it<sup>9</sup>.
- e) The Human Development Index (HDI) is a summary measure of average achievement in human development: health, education and standard of living.
- f) Multidimensional Progress Index (MPI) focuses on the level of deprivation and uses information from 10 indicators organized into three dimensions: health, education and living standards <sup>10</sup>.

<sup>&</sup>lt;sup>7</sup> Stiglitz, SEN ea. Mis measuring our lives: Why GDP doesn't add up.2010.

<sup>&</sup>lt;sup>8</sup> In 2011 the United Nations adopted the resolution inviting countries to measure the happiness of their people. The World Happiness Report (2012) mentions 'increasingly, happiness is considered a proper measure of social progress and the goal of public policy'.

 $<sup>^{\</sup>rm 9}$  2016 UNDP Human Development Report. Background Paper.

<sup>&</sup>lt;sup>10</sup> Alkire S., Conconi A., and Seth S., Multidimensional Poverty Index 2014. Methodology and notes.



The SER finds it important to note that many of the indexes and approaches mentioned above, are founded on either the - basic needs approach, the capability approach or a combination of both.

The basic needs approach (BNA) aims to fulfill the unmet basic needs of the poor. People who are unable to meet their basic human requirements are living in poverty which can be extreme or life threatening. A basic set of minimum requirements of human life such as clean water, clothing, food, nutrition, shelter, and sanitation etc., are identified for the poor to have at their disposal. The Capabilities Approach (CA) is a comprehensive human development approach that focuses on improving the well-being of people by expanding their capabilities so that they can choose for themselves and lead the life they value. It connects the problem of poverty with the broader issue of human development.

The BNA sees poverty in terms of consumption deprivation (inadequate food, nutrition, clean water, education, health, etc.) while the CA focuses on deprivation of opportunities and concentrates on capacity building of people rather than what and how much they consume<sup>11</sup>.

Reviewing the selected indexes in the table below, the Well Being Survey (WBS) of Sint Maarten is a preliminary start to provide a baseline to determine the basic needs of citizens on the island<sup>12</sup>.

On a household and individual level, various

Index	Dimension 1 Indicators	Dimension 2 Indicators	Dimension 3 Indicators	Dimension 4 -14 Indicators
Social Progress Index (SPI)	Basic human needs: nutrition and basic medical care; air, water and sanitation, shelter, personal safety	Foundations of Well Being: access to basic knowledge; access to information and communications, health and wellness, ecosystem sustainability	Opportunity: Personal rights; access to higher education; personal freedom; equity and inclusion	
Multidimensional Progress Index (MPI)	Education Years of schooling; child school attendance	Health Child mortality; nutrition	Standard of Living Electricity; sanitation; Drinking water; floor; cooking fuel; assets ownership	
Gross National happiness (GNH)	Psychological wellbeing;	Standard of living	Good governance	Health; education; community vitality; cultural diversity and resilience; balanced time use; ecological diversity
Well-Being Survey St. Maarten (WBS)	Perception poverty; balanced life; need; economic development contribution to economy	Social support  Meeting with family/friends  Avenues for support when in need of financial	Household finances Financial management	Problems impacting a healthy lifestyle, Health; satisfaction Worries and illness; satisfaction grades

aspects are being addressed with respect to poverty. What can be observed when considering the global sustainable development agenda is that the WBS of Sint Maarten compared to the other indexes, indicators such as environmental sustainability, good governance, resilience and cultural inclusion are not (yet) included.

<sup>&</sup>lt;sup>11</sup> Sen A. Capability Perspective to Development and Well-being; Wong, Shing Yip, Understanding Poverty: Comparing Basic Needs Approach and Capability Approach. 2012.

<sup>12</sup> Along with the Household Survey.



Similarly, the SER sees it important as a result of climate change, to include the geographic vulnerability of Sint Maarten and for indicators such as (human) resiliency to also be considered.

The SER recognizes that the various surveys and Indexes are a work in progress, nevertheless when trying to include a broader view of wellbeing, social development and progress, the SER sees room for the expansion of the Well Being Survey and Household Survey with additional indicators or the adoption of one of the more developed indexes. The SER learned that an alternative index<sup>13</sup> is possibly being considered for Sint Maarten. While the SER recognizes the effort and expertise required to finalize the decision on the index being considered, the SER advises to accelerate the decision- making process on the index so that data on the SDG indicators can be collected, measured and monitored to achieve the SDGs by 2030.

The SER acknowledges that poverty is multidimensional, however, the SER contends that social progress and sustainable development goes beyond measuring poverty and deprivation alone. Keeping in mind the distinct point of departures of both BNA and CA, the SER points out that choosing one over the other will result in different policy choices and outcomes. After having reviewed the selected indexes, and from the point of departure of including an additional (social) measure next to GDP, the SER is in favor of a comprehensive multidimensional approach to determining well-being and progress outside of GDP which is based on the combination of both BNA and the CA. Correspondingly important, is that the chosen index clearly considers the nature of the relationship between the selected indicators especially when aggregating dimensions next to the ability to be coupled with the SDG's. The data gathered from the index should be used in a social economic model. This requires the development of a social model or an upgrade of the economic model. In order to facilitate the above, reliable data must be collected and available and this brings the SER to the next important point in this advice.

## 2. The importance of DATA and data collection.

The SER recognizes that per sector, there are different definitions of data collection such as the World Health Organization (WHO)<sup>14</sup>or academia<sup>15</sup>. Acknowledging that there are different definitions of data collection per sector, the SER will maintain for simplicity, the systematically documenting of information (data) that can be used for various purposes. It is important to note that the SER refers not only to economic data collection but also multi-sectoral data collection (transcending the various ministries and entities).

In several of its advices, the SER has consistently emphasized the importance of accurate and timely data, statistics and information. During its research activities, the SER has frequently encountered challenges with accessing the necessary data and information in various areas.

<sup>&</sup>lt;sup>13</sup> Presentation STATS department to the SER. May 23<sup>rd</sup>, 2019; meeting with Social Development department August 8<sup>th</sup>, 2019.

<sup>&</sup>lt;sup>14</sup> See for example Word Health Organization (WHO). Accessible via: https://www.who.int/violence\_injury\_prevention/surveillance/en/

<sup>&</sup>lt;sup>15</sup> See for example: <a href="https://ori.hhs.gov/education/products/n">https://ori.hhs.gov/education/products/n</a> illinois u/datamanagement/dctopic.html



Moreover, in a significant number of reports commissioned by the government, the authors have consistently indicated that data at the local level is either not available or outdated. Similarly, very often during presentations, whether internationally, regionally or locally, it is noted that local data is either not available or only partially available.

This highlights the fact that there are significant issues regarding data collection, data availability and transfer on Sint Maarten and this strengthens the need for comprehensive data collection. The collection of local data is essential for informed evidence-based decision making on all levels and to be able to cater to societal needs based on Sint Maarten's reality.

Furthermore, data is needed not only to support rational decisions but also for executing various categories of evaluations, empirical research, innovation, measuring socio-economic performance and to ascertain the investment climate for business on the island among other things. Moreover, as society transforms due to digitization, government must strategically work toward a more data driven public sector, as research has established that a data driven public sector will stimulate evidence - based policy making and service delivery while simultaneously addressing, good governance, integrity, openness and fairness<sup>16</sup>.

Conditional to the information needs, quantitative or qualitative data can be collected in several ways using various methods such as mapping, but not limited to, surveys, face to face interviews via records and assessments.

From government's perspective data collection and analysis can provide geospatial information, information on how targeted groups are responding to different policies or for (re-) assessing the investment climate for example. From the perspective of businesses, it can enable them to respond to market changes timely and adequately. This response is also a necessity for innovation. From the perspective of the SER, data is used for research and analysis of socio-economic development(s), verification and substantiation of the various topics on which the SER issues its advice. Additionally, from a local, regional and international perspective, data collection is important to monitor, measure and evaluate progress of programs or goals such as the Sustainable Development Goals (SDGs).

For those entities and departments that have not yet started data collection, the SER recommends standardizing data collection by using existing standard formats for the data being produced by aligning with international criteria for data collection in the various areas. The SER also recognizes that various ministries have international reporting responsibilities, surveillance or monitoring obligations and for those sectors a great deal is already standardized<sup>17</sup>.

<sup>&</sup>lt;sup>16</sup> OECD. A data-driven public sector: Enabling the strategic use of data for productive, inclusive and trustworthy governance. Accessible via: <a href="https://www.oecd-ilibrary.org/governance/a-data-driven-public-sector">https://www.oecd-ilibrary.org/governance/a-data-driven-public-sector</a> 09ab162c-en

For example: International Health regulations (IHR) accessible via: <a href="https://www.who.int/gho/ihr/en/">https://www.who.int/gho/ihr/en/</a> and monitoring child protection under UN Convention on the Rights of the Child. Accessible via: <a href="https://resourcecentre.savethechildren.net/node/5194/pdf/5194.pdf?embed=1">https://resourcecentre.savethechildren.net/node/5194/pdf/5194.pdf?embed=1</a>



The SER recognizes that by law the Department of Statistics of Sint Maarten (STATS) is the designated authority to gather data for statistical information for the country. STATS main role is to collect, integrate, analyze and disseminate statistical information about Sint Maarten. The data is obtained via administrative records and various surveys<sup>18</sup>.

The main goal of measuring, collecting and monitoring the relevant data for statistics is mainly to ensure informed policy decision-making, resource prioritization, strategy, advocacy, international comparison and benchmarking.

The SER recognizes that STAT is not the only entity that generates (statistical) information. Also, within the different ministries there are various departments that through their different responsibilities and procedures are responsible for recording specific data and information. Other entities where data maybe collected are the Central Bank, non-governmental organizations, semi-governmental institutions and private sector entities.

### Quality of data.

While acknowledging the importance of collecting data, the SER would like to underscore the fact that to be able to make adequate and informed decisions, the data must also be accurate, timely and reliable. Hence, the quality of the data must be of a high standard. Policies will only be beneficial if the correct information is available. With an evolving society, the demand for high quality data continues to increase. It is imperative therefore, to ensure that departments within the various ministries, organizations and other entities collects and produce truthful, complete, accurate, timely and validated data as this data can be used for statistical information to support policy making, investment decisions, auditing performance evaluation and management and so forth. Furthermore, the SER raises the concern, having signaled on occasion, that at times the data produced is of questionable integrity. Therefore, the SER advises that existing databases and repositories be checked, cleaned and upgraded as uncleaned unreliable databases compromises the reliability and validity of what has been compiled. This also has a distorting effect on the reality. The implications this can have can be catastrophic.

The cost of poor decision-making due to insufficient or inaccurate data can result in the loss of human life and property. For example, Sint Maarten has been confronted with precarious situations after the both hurricanes of 2017 when receiving assistance, due to inaccurate or insufficient information. Other primary reasons for having clean, accurate and timely data are for realistic medium to long-term planning, disaster management and hurricane preparedness, building resiliency (fiscal, human, environmental and economic), monitoring of outbreaks, managing public finances and education. According to the World Bank, to be of use, data and statistics must be reliable and relevant and should be compiled correctly following standard practices and methodology. Moreover, they must meet the needs of users and answer the questions posed by policy makers <sup>19</sup>. From an international point of view,

For full list of activities access via <u>www.stat.gov.sx</u>

<sup>19</sup> World Bank. Accessible via: https://data.worldbank.org/about



Sint Maarten is not the only country challenged with adequate data collection of high quality. Other countries have similar challenges in providing data and statistics that meet the above-mentioned criteria. On one hand, some countries find themselves underinvesting in (national) statistical or data collection systems which results in poor data quality which policy makers are unwilling to rely on.

On the other hand, the lack of demand leads to fewer resources made available for data production and quality control<sup>20</sup>. Nonetheless, the SER highlights the fact that sustainable social economic development is dependent on high quality data collection and analysis. The SER illustrates this with the following examples within the Kingdom of the Netherlands and on Sint Maarten.

In Aruba, a similar tourist destination, a study<sup>21</sup> on the value of the island's natural resources was executed. With data collected from both the local population and visitors, it was established that tourist expenditures involving natural resources amounted to US\$269 million in value. Environmental degradation could result in 50% decrease in visitor numbers. The study also revealed that tourists are willing to pay US\$10.3 million and residents US\$3.6 million additional fees to protect nature on the island, while in comparison small fishery on Aruba provides a value of US\$ 4.45 million. Similarly, in Sint Eustatius the total economic value (TEV) of the ecosystem services provided by the marine and terrestrial ecosystems of St. Eustatius in 2014<sup>22</sup> was estimated at \$25.2 million per year. On Sint Maarten the updated Economic Valuation Study on coral reefs ecosystems highlights the economic contribution of healthy coral to the economy of Sint marten, which was found to be US\$66.6 million. In 2010 the study found that coral reefs contribute US\$57.8 million to the economy. The increase in the economic value of coral reefs reflects the benefits of executing the Man of War Shoal Marine Protected area<sup>23</sup>. Other Caribbean research estimated the coral reef economic contribution, totals **US\$101–130** million in Tobago and US\$ 160-194 million in St. Lucia<sup>24</sup>. This information can be used to determine effective conservation measures for sustainable development on the island while it provides government with sufficient evidence to prioritize resource allocation and developmental strategy, informed policy making and more. The SER is concerned that in absence of adequate and reliable data, the island is potentially functioning at a substandard level not only socially and economically but also at the level of the environment.

<sup>&</sup>lt;sup>20</sup> World bank. Accessible via: <a href="https://data.worldbank.org/about/data-programs">https://data.worldbank.org/about/data-programs</a>

<sup>&</sup>lt;sup>21</sup> The Economic of Ecosystems and Biodiversity (TEEB) study was executed to quantify and integrate the value of the island's natural capital in long term planning and sustainable development.

Accessible via: <a href="https://www.dcbd.nl/document/aruba%E2%80%99s-value-nature">https://www.dcbd.nl/document/aruba%E2%80%99s-value-nature</a>.

<sup>&</sup>lt;sup>22</sup> Accessible via: <a href="https://www.dcbd.nl/document/st-eustatius-economic-value-nature">https://www.dcbd.nl/document/st-eustatius-economic-value-nature</a>

<sup>&</sup>lt;sup>23</sup> Accessible via: <a href="https://www.dcbd.nl/sites/www.dcbd.nl/files/documents/Bervoets%25202010%2520Working-Paper-Economic-Valuation-SXM-Reefs.pdf">https://www.dcbd.nl/files/documents/Bervoets%25202010%2520Working-Paper-Economic-Valuation-SXM-Reefs.pdf</a> and <a href="https://smn-news.com/st-maarten-st-martin-news/18410-sint-maarten-s-coral-reefs-contribute-usd-66-606-042-to-economy.html">https://smn-news.com/st-maarten-st-martin-news/18410-sint-maarten-s-coral-reefs-contribute-usd-66-606-042-to-economy.html</a>

<sup>&</sup>lt;sup>24</sup> World Resources Institute. Coastal Capital Report: Economic Valuation of Coral Reefs in Tobago and St. Lucia.



## Data analytics and sharing.

Another aspect that the SER is concerned about is the lack of sharing of data. Data-sharing is a proven way to increase the ability of policymakers, researchers, and others to analyze and translate data into meaningful reports and knowledge so that subsequently, decision- makers will have a complete and concrete picture to base a decision upon. From a holistic approach, data sharing also prevents duplication efforts in data collection while encouraging collaboration.

For Sint Maarten, an essential aspect of data sharing is not only for planning and policy making for the (re-)building of a sustainable society, but particularly for disaster management, hurricane preparedness as well as other (natural) disasters. Yet, the SER signals that data sharing seems to be a big obstacle. There seems to be only modest data sharing between the various departments, institutions and other entities while information is only disseminated haphazardly upon request, signaling that there is little systematic coordination of collection, collaboration and sharing of data between entities, should the data be available. As indicated earlier, often certain data is either non-existent or scarce.

However, at times there also seems to be a lack of willingness to share available data. This may be due to various reasons. However, the SER is of the opinion that there is strength in combining different datasets as this may shed (new) light on various aspects of a project or policy. The SER emphasizes that to be able to reap the full benefits of data sharing, multi-sectoral projects and policies must be aligned with each other within and among the various ministries and entities. This can be achieved by each ministry providing an overview of its priority projects which involves another ministry or sector entity, which requires collaboration in providing the required data and information. To prevent potential adverse effects of policies lacking essential data input from others, the SER stresses the consistent multi-sectoral collaboration in data sharing.

Data sharing also encourages accountability and transparency while data from multiple sources can often be combined to allow for comparisons that overlap ministries and departments. The SER emphasizes the fact that, for all stakeholders involved, that if the data is not shared nor communicated with each other, then effective policies, reliable audit reports, forecasts nor assessments can be produced. Furthermore, the SER points out that to be able to support adequate and sustainable social economic development, there is a strong need for increased cooperation between stakeholders with respect to data collection and transfer. This cooperation can potentially reap enormous savings. Moreover, establishing public-private collaboration with government also sharing its data, information and outcomes, not only strengthens trust and alignment between citizens, stakeholders and government, it also promotes transparency and unlocks innovation 25. The value of data is gained by aggregating the data and using data analytics to transform the data into insight for improved decision making, increased efficiency, integrated view of citizens, innovation and better (public) services for the

World Economic Forum (WEF). Data Collaboration for the Common Good Enabling Trust and Innovation Through Public-Private Partnerships. April 2019.; Munné R. Big Data in the Public Sector. In: New Horizons for a Data driven Economy. 2016.



benefit of citizens, stakeholders and society at large<sup>26</sup>. The benefits of data sharing go beyond what is stated in this advice but some of the benefits are: avoiding duplication of data collection efforts, it is an essential basis for projects and planning, it increases transparency and can avoid negative consequences of overlapping policy decisions, provides new insights, can strengthen policy and planning decisions, increase accuracy in (financial) administration just to mention a few<sup>27</sup>.

## Data management platform.

Good data management includes developing effective processes for consistently collecting and recording data, storing data securely, cleaning data, transferring, effectively presenting data and making data accessible for verification and use by others<sup>28</sup>.

To boost data sharing and increase accessibility to collected data, the SER advises that the infrastructure be made available to support it. As such, the SER advises the creation of a (intergovernmental) centralized platform or repository to facilitate data and information sharing in a structured manner. This must be supported by data processing system(s) and interfacing of systems. As research suggests, this will support transparency, efficiency and accountability. Moreover, the availability and use of a centralized data system by multiple stakeholders enables and encourages more confidence in the use of (existing) data for effective and informed policy making and planning purposes. Other stakeholders may include (semi-) government, NGO's, private sector entities and the community.

The SER emphasizes that for a centralized platform as described above to be effective, this must be a government endorsed data management and sharing platform. The SER highlights this aspect to guarantee a high level of cooperation as well as to guarantee a high level of quality of data to be shared while avoiding unpredictability. To ensure the full commitment and cooperation of all, the SER sees it important to set up a cooperation agreement based on fundamental data sharing governing principles such as ethical data sharing principles, data access (various access rights), data protection and the legal, just and fair use of data. This must be managed by selected expert data manager(s). An essential aspect of the data sharing agreement is that it must be based on a clear and common goal, aligning all stakeholders involved. Additionally, stakeholders' rights and obligations, the information to be shared, privacy protection, budget and digital management must be clearly defined. Confidentiality issues can be circumvented by creating specific data sets when needed.

While each stakeholder is the owner of its own data, further aspects that must be considered are quality and validity, security, how data is stored and disseminated. Key is that at all times data on (vulnerable) groups are protected.

<sup>&</sup>lt;sup>26</sup> Retrieved from <a href="https://www.sas.com/content/dam/SAS/engb/doc/whitepaper1/value-of-data-in-public-sector.PDF">https://www.sas.com/content/dam/SAS/engb/doc/whitepaper1/value-of-data-in-public-sector.PDF</a>

<sup>&</sup>lt;sup>27</sup> The SER refers to data sharing in accordance with privacy protection. See in Dutch: Landsverordening bescherming persoonsgegevens. AB 2010, GT no. 2.

<sup>&</sup>lt;sup>28</sup> United Nations Children's Fund (UNICEF). Overview: Data Collection and Analysis Methods in Impact Evaluation. Methodological Briefs Impact Evaluation No. 10.2014.



These principles and guidelines are not intended to replace applicable laws, however, the aforementioned can be used to structure the legal basis for the data management platform to share and use data in order to build trust among stakeholders<sup>29</sup>. Moreover, the SER considers the data platform as a strengthening and supporting contributor to the STATS. The SER advises that STATS be designated as an autonomous national statistical office giving the office greater access to certain data for statistics.

# Data communication and awareness campaign.

To support the increase in data use for the creation of a complete and accurate picture of complex issues the island is confronted with and for timely informed decision making, the SER recommends a multi-level data sharing and data use campaign must be launched, bringing the awareness of the relevance and importance of data to all levels of the community including stakeholders and partners. Increasing the awareness of the benefits of data collection and the use of data and statistics is paramount in the campaign.

Not only will the promotion of the importance of data benefit data collection and data sharing, it will also foster empowered and better-informed citizens as citizens gain more awareness, critical thinking and understanding how to use statistics stemming from the data collected.

As we evolve into a more data- driven society it is inevitable that the need for understanding data and statistics will grow. Without some form of statistical literacy, citizens may not understand the importance of collecting data and participating in the various collection methods such as household surveys. Additionally, if citizens and stakeholders see the value of what the data collected is used for will stimulate the willingness of the community to share their data in the various community surveys. For Sint Maarten, collecting data and using the information to inform citizens is of utmost importance especially in this post-hurricane(s), rebuilding and recovery phase. Moreover, the imminent multifaceted and complex challenges the island is confronted with as a result of the hurricanes, requires above all accurate and up to date data as the main building blocks for improving resiliency in all sectors.

<sup>&</sup>lt;sup>29</sup> World Economic Forum (WEF). Data Collaboration for the Common Good Enabling Trust and Innovation Through Public-Private Partnerships. April 2019.