

ADVANCING STATISTICAL DEVELOPMENT IN SMALL ISLAND DEVELOPING STATES IN THE POST-2015 ERA

THE NSDS APPROACH

October 2014



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1. INTRODUCTION

Small island developing states (SIDS) have unique needs and vulnerabilities that have to be recognized, understood and addressed for sustainable development to be realized. Their development challenges stem from factors such as relative isolation or remoteness, small market size, narrow resource and export base, susceptibility to external economic shocks, vulnerability to environmental threats and effects of climate change, and exposure to intense and frequent disasters brought about by natural events. Such challenges often result in high levels of poverty and inequality, greater dependency on imports, susceptibility to volatile energy and food prices, and increasing national debt, among others that adversely impact social development.

Determined to achieve sustainable development Post-2015, SIDS in the Atlantic, Indian Ocean, Mediterranean and South China Sea (AIMS), Caribbean, and Pacific regions have identified a number of priority areas requiring cooperation and partnership at all levels with considerable support from the international community. These include, among others, economic and social development, energy, transport, consumption and production, food security, water, health and non-communicable diseases, climate change, disaster risk reduction, oceans and seas, forests, biodiversity, and management of chemicals and waste.

Adequate policies and programs on these priority areas will have to be put in place to ensure that it contributes to national sustainable development. In the *SAMOA Pathway: Draft Outcome Document of the 3rd Conference on SIDS¹*, **data and statistics has been identified as one of the enabling factors to attain sustainable development**. The document recognizes the importance of statistics to inform sustainable development policies and evaluate the implementation of any internationally-agreed development goals. It also calls for upgrading of SIDS national statistical systems and mainstreaming of sustainable development data collection and analysis.

¹ Draft Outcome Document of the Third International Conference on Small Island Developing States. (see <http://www.sids2014.org/content/documents/336SAMOA%20Pathway.pdf>).

The Millennium Development Goals (MDGs) served as catalyst for improving national statistical systems and their capacity to generate statistics and indicators needed to monitor progress against set goals. Following the adoption of the MDGs, the national strategies for the development of statistics (NSDS)² and statistical advocacy were introduced and implemented in a number of developing countries. 15 years after the launch of NSDS, PARIS21 disseminated the second version of the NSDS guidelines in April 2014³.

The new version of the NSDS guidelines takes into account lessons learned from the design and implementation of NSDSs in nearly a hundred countries since its adoption. It integrates lessons from global statistical development that complements the NSDS approach and features specific country situations and issues not featured in the first version. New topics in the guidelines include fragile and small island developing states (SIDS), sectorial strategies, infra national strategies, and regional strategies, among others. It is continuously updated to document growing lessons and good practices on NSDS design and implementation which may help countries as they undergo key statistical reforms.

PARIS21 prepared this paper as part of its contribution to improving literature on NSDS and to identify ways in which the international community can help advance statistical development of SIDS in Post-2015. The paper examines the uniqueness of SIDS statistical systems and its vulnerabilities, existing challenges and opportunities. It documents lessons and good practices in statistics development in some SIDS countries as well as statistics cooperation strategies in Pacific and Caribbean regions. A number of recommendations are presented that adapts and complements the NSDS approach to better address statistical issues confronting SIDS.

2. CHARACTERISTICS OF SIDS AND ITS NATIONAL STATISTICAL SYSTEMS

The United Nations Department of Economic and Social Affairs (UNDESA) currently recognize 51 small island developing states and territories in the monitoring of SIDS sustainable development.⁴ These states and territories either belong to the three geographical regions –

² An NSDS provides a country with a strategy for developing statistical capacity across the entire national statistical system (NSS). It provides a vision for where the NSS should be in five to ten years and sets milestones for getting there. The NSDS is a comprehensive and unified framework for continuous assessment of evolving user needs and priorities for statistics and for building the capacity needed to meet these needs in a more coordinated, synergistic and efficient manner. It is also a framework for mobilising, harnessing, and leveraging resources (both national and international) and a basis for effective and results-oriented strategic management of the NSS.

³ <http://www.paris21.org/nsdsguidelines/>

⁴ SIDS include 38 countries that are recognized members of the United Nations and 13 non-UN members or Associate Members of regional commissions
<http://sustainabledevelopment.un.org/index.php?menu=1520>

the Atlantic, Indian Ocean, Mediterranean and South China Sea or AIMS⁵, the Caribbean⁶, and the Pacific⁷. It constitutes small islands and low-lying coastal countries and territories characterized by their small size, isolation, and common vulnerabilities and development challenges specifically in terms of environmental and climate change concerns.

2.1 HETEROGENEITY

The SIDS constitutes a heterogeneous set of countries and territories reflected in a number of variables (see Annex Table 1):

- Size (in sq. km)⁸ – 4 islands with more than 100,000 sq. km. area (Papua New Guinea is the largest island); 11 islands with 10,000 to 50,000 sq. km.; 7 islands with 1,000 to 9,000 sq. km.; and 25 islands with less than 1,000 sq. km. area (Nauru is the smallest island).
- Population – 5 countries with more than 5 million inhabitants (Cuba, Dominican Republic, Haiti, Papua New Guinea, Singapore); 10 countries with population of 500 thousand to 3 million; 19 countries with population of 100 to 500 thousand; and 16 countries and territories with less than 100 thousand population. (Niue and Montserrat having the smallest population of only 1,500);
- Gross National Income per capita⁹: 7 countries belong to lower middle income (per capita income of USD 1,006 to 3,975); 17 countries are within the upper middle income category (per capita income of USD 3,976-12,275); 11 countries belong to high income category (per capita income of USD more than 12,276);
- The UN identifies 9 SIDS (Comoros, Guinea-Bissau, Haiti, Kiribati, Sao Tome and Principe, Solomon Islands, Timor-Leste, Tuvalu, and Vanuatu) as belonging to the LDC category¹⁰.

2.2 HIGH VULNERABILITY: COMMON FEATURE OF SIDS

Despite the heterogeneity of SIDS, it shares a common characteristic, that of its vulnerability. The special vulnerability of SIDS both in environment and development terms was first acknowledged at the Rio de Janeiro Conference in 1992. “The small size, limited resources, geographic dispersion and isolation from markets place them at a disadvantage economically and prevent economies of scale”¹¹. The First UN Conference on SIDS, convened in April 1994

⁵ Bahrain, Cabo Verde, Comoros, Guinea-Bissau, Maldives, Mauritius, Sao Tome & Principe, Seychelles, and Singapore.

⁶ Anguilla, Antigua and Barbuda, Aruba, the Bahamas, Barbados, Belize, British Virgin Islands, Cuba, Dominica, Dominican Republic, Grenada, Guyana, Haiti, Jamaica, Montserrat, Netherlands Antilles, Puerto Rico, Saint Kitts and Nevis, Saint Lucia, Saint Vincent & the Grenadines, Suriname, Trinidad & Tobago, US Virgin Islands.

⁷ American Samoa, Commonwealth of Northern Marianas, Cook Islands, Fiji, French Polynesia, Guam, Kiribati, Marshall Island, Federated State of Micronesia, Nauru, New Caledonia, Niue, Palau, Papua New Guinea, Samoa, Solomon Islands, Timor-Leste, Tonga, Tuvalu, Vanuatu.

⁸ 5 territories with no data.

⁹ SIDS countries are categorized into income groups following the World Bank categories. See <http://go.worldbank.org/Q08GIVEDK0>

¹⁰ 2014 List of Least Developed Countries. UN DESA Development Policy and Analysis Division(see http://www.un.org/en/development/desa/policy/cdp/ldc/ldc_list.pdf)

¹¹ Agenda 21 Document; 17.123.

<http://sustainabledevelopment.un.org/content/documents/Agenda21.pdf>

produced a document, Barbados Plan of Action (BPOA), which identified 14 program areas for sustainable development of SIDS. Ten years after the BPOA, the challenges facing SIDS became even greater and the need to redefine strategy for implementation became evident thus, in 2005, the Mauritius Strategy for the Further Implementation of the Programme of Action for the Sustainable Development of SIDS (MSI) was adopted with 19 priority areas.

While progress has been made in the MSI, the continuous natural disasters and impacts of climate change has significantly slowed down progress and development. The new challenges that SIDS face made it difficult for these group of countries and territories to achieve sustainable development. Clearly, new and alternative solutions are needed to implement and achieve the goals of BPOA and MSI.

In the Report of the Secretary General on the Five-year review of the MSI¹², the special vulnerability of SIDS to natural, economic and social systems has increased due to climate change and global financial crises and which can be attributed to the following characteristics of SIDS: 1) small size; 2) remoteness; 3) vulnerability to external shocks such as natural disasters, high production and trade costs, and exposure to commodity price volatility; 4) narrow resource base specifically energy, water, mineral and agriculture resources; and 5) exposure to global environmental challenges for instance sea-level rise, destruction of coral reefs, waste pollution, and scarcity of fresh water.

Findings in the UNCTAD report on SIDS Vulnerability (2011) points to three sources: 1) economic consequences of external shocks is 33 percent higher than non-SIDS developing countries; 2) oil price related shocks is 12 times more than non-SIDS developing countries; 3) 8 percent more vulnerable to climate change effects.

Relatedly, the UN Department of Economic and Social Affairs and Economic and Social Commission for Asia and the Pacific (ESCAP) provided quantitative evaluations of the vulnerability of SIDS. It shows that the vulnerability gap between SIDS and other countries has widened since 2007.

UNDESA-ESCAP mention that “economic vulnerability of higher income SIDS which are not LDC is on average higher than that of the group of all LDCs, which indicates that they cannot sufficiently compensate for their high intrinsic exposure with higher coping capacities, despite their higher incomes”.

To illustrate the vulnerability of SIDS to external economic shocks, the situation of the Kingdom of Tonga shows that in 2007-2008, remittances represented 39 percent of GDP; Official Development Assistance (ODA) 12 percent, and Foreign Direct Investment (FDI) 11 percent.

¹² Five-year review of the Mauritius Strategy for the Further Implementation of the Programme of Action for the Sustainable Development of Small Island Developing States, Report of the Secretary-General. July 2010 (see http://www.sidsnet.org/msi_5/docs/hlr/A-65-115-English.pdf)

Vulnerability index have been defined and measured for the SIDS: an economic crisis vulnerability index, and an environmental vulnerability index¹³.

The high economic and social diversity of SIDS is balanced by their common vulnerability to shocks which justifies a specific approach to sustainable development and the creation of this specific grouping among developing countries. In order to monitor the various dimensions of SIDS vulnerability and their resilience, quality data and indicators are necessary. Therefore, SIDS may need to strengthen their national data and information systems¹⁴. The international community, particularly UN agencies, is called to assist efforts of SIDS to strengthen national disaggregated data and information systems, including its analytical capabilities for decision-making in tracking progress and development of vulnerability-resilience country profiles; in developing databases and institutionalizing national indicators for monitoring and evaluation of sustainable development.¹⁵

Strengthening of data management capacities of SIDS for monitoring and evaluation of sustainable development is likewise identified as one of the enabling factors to achieving sustainable development in the *SAMOA Pathway: Draft Outcome Document of the 3rd Conference on SIDS*. It is therefore important to support the strengthening of capacities of national statistical systems of SIDS to ensure the provision of quality data for national policy and development use. To certain extent, it is also important to build regional support to statistics development as is the practice and experience in the Caribbean and Pacific regions.

2.3 CHARACTERISTICS OF SIDS NATIONAL STATISTICAL SYSTEMS ¹⁶

SIDS national statistical systems (NSS)¹⁷ vary considerably. The profile of the national statistical offices (NSO), the major data producer in a country, differs from one island to another. Kiribati, Marshall Islands, Nauru, Tuvalu and Palau in the Pacific have between 4 and 10 staff in their respective NSO while Jamaica has 327 staff. NSO's annual budget in Jamaica amounts to USD 6.7 million compared with USD 430,000 in Tonga or Vanuatu. Many NSOs are part of larger Ministries and have little autonomy and often lacks the mandate to coordinate the entire NSS.

While many NSS share the same constraints and challenges, may it be in larger or smaller countries, a number of distinct characteristics of NSS are made much more acute in SIDS:

¹³ Trends in Sustainable Development in SIDS. UNDESA. 2010.

¹⁴ See footnote 11, page 37, para. 120.

¹⁵ Outcome document of the High-level Review Meeting on the implementation of the Mauritius Strategy for the Further Implementation of the Programme of Action for the Sustainable Development of Small Island Developing States. Resolution adopted by the General Assembly. 15 October 2010. (see http://www.un.org/ga/search/view_doc.asp?symbol=A/RES/65/2)

¹⁶ In the context of this paper, the characteristics of SIDS national statistical system mostly pertains to those that can be found in lower-middle to low income countries and territories. High income SIDS may not necessarily have the same features of the NSS described herein.

¹⁷ The national statistical system (NSS) is the ensemble of statistical organisations and units within a country that jointly collect, process and disseminate official statistics on behalf of national government. OECD Glossary of Statistical Terms. <http://stats.oecd.org/glossary/>

1. Human resources

- Inadequate or often lack of highly competent professionals with relevant experience to undertake statistical tasks. In SIDS, there is limited capability of statistics professionals to perform specialized tasks which results in increased reliance on very few qualified staff members resulting in overburdening the staff that delays the delivery of important data.
- Need for continuous training and re-training to shore up the knowledge base because a relatively small number of people are responsible for dealing with diverse sets of statistical functions (e.g., consumer price indices, sample survey design, and compilation of environmental statistics).
- Heavy reliance on external (and externally funded) technical expertise.
- High personnel turnover and a large number of temporary personnel.

2. Geographic and demographic characteristics

- Relatively larger samples required in relation to smaller populations size to obtain valid results in statistical surveys and higher per capita cost of data acquisition.
- Large territory but relatively small population or with unevenly and sparsely distributed population (e.g., Kiribati has islands 3,000 km apart and people have to take an international flight between these islands).
- Lack of anonymity of statistical units in the population requiring specialized treatment of aggregated data and public use samples.
- Issues of diversity between populations or sub-populations leading to higher cost of implementation of harmonized standards, classification and coding systems.

3. Information Technology (IT)

- Requires a smaller amount of software customization due to the relatively narrower level of diversity of data elements.
- Easier adoption of standardized coding and classification systems across statistical units, when there is commitment.
- Slow response of central IT services to statistical requirements for hardware and software support, which leads to generalized software recommendations not to specialized one.
- Lack of statistical data confidentiality from other data-producing agencies of government.

4. Regional support for statistics

- High level of reliance on strong regional centers for technical and statistical support resulting in high cost of travelling in the region, particularly true in the Pacific Islands and in Caribbean countries.

5. Fragility

- Need for proper backup in situations when national systems fail, political and security conditions deteriorate, data is lost or unavailable, and/or when personnel are unavailable or have been replaced or transferred.

6. Confidentiality

- Strict adherence to confidentiality principles must be observed because of the relative ease with which a specific entity's records of data may be identified even when aggregation rules are employed to ensure non-disclosure.
- Resistance from other government agencies to provide public administrative data to the statistical agency/NSO which results in non-reporting of some critical events.
- Inadequacy and/or often lack of strict data dissemination policies.

7. Other issues

- Inadequate, outdated, or absence of statistical legislation that serves as framework for a coordinated and harmonized NSS.
- Lack of statistical culture and NSO knowledge.
- Weak or absence of leadership in NSS and non-existent national statistical councils or similar statistical bodies.

SIDS NSS also face specific constraints linked to their vulnerability and it is often reflected in their NSOs. It is not surprising that the most vulnerable NSOs are found in the smallest and less affluent countries. Thus, there may be a need to differentiate among SIDS NSS. Taking into account two variables, population under 120,000 and GNI per capita under USD 4,000, 31 countries and territories may be considered as facing strong NSS constraints for their NSS. 24 countries and territories because of its small size (American Samoa, Anguilla, Antigua and Barbuda, Aruba, British Virgin Islands, Cook Islands, Dominica, Federated State of Micronesia, Grenada, Kiribati, Marshall Islands, Montserrat, Nauru, Niue, Commonwealth of Northern Marianas, Palau, Puerto Rico, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and Grenadines, Seychelles, Tonga, Tuvalu, and US Virgin Islands). Nine (9) countries due to low GNI per capita (FSM, Sao Tome and Principe, Vanuatu, Kiribati, Papua New Guinea, Haiti, Comoros, Solomon Islands, Guinea-Bissau), 6 of which are categorized as LDCs or with low intermediary income.

The role of low GNI per capita may be illustrated by Comoros' NSO. With only 18 NSO staff compared with 30 in Tonga, GNI per capita in Comoros is at USD 1,505 and USD 5,316 for Tonga. Population (2013 data) is significantly higher in Comoros with about 735,000 while only 103,300 for Tonga. Other variables such as political commitment may also play a role to explain the gap between the two NSOs. If extreme smallness in terms of population criterion is taken into account, Marshall Islands, Nauru and Palau are very specific, with NSO staff of only 5 (Marshall Islands and Nauru) and 4 (Palau). These 12 countries (LDCs and smallest NSOs in terms of NSO size) would then qualify for priority action as far as NSSs are concerned.

2.4 CHALLENGES FACING SIDS NATIONAL STATISTICAL SYSTEM

- **SIDS NSS do not have enough financial resources to meet the expenditures required by a standard statistical system.** The cost of a standard survey (i.e., household income and expenditure survey or HIES) is often out of reach of the smallest and poorest SIDS NSS budget. For instance, the total cost of an HIES in Tonga or Vanuatu amount to more or less the total annual budget of the NSO. The cost of information therefore is higher in island countries, due to wide dispersion that tends to significantly increase the survey operation costs.
- **NSOs require highly specialized staff in statistics and demography, which may not be currently available in SIDS.** Narrow skills base is a feature that prevails in the smallest islands, and it is reinforced by high rates of outmigration.
- **The requirements of the international community in terms of information are formatted for "standard" countries and out of reach for most SIDS.** The monitoring of the Millennium Development Goals (MDGs) requires a lot of sector information which is often not available in SIDS. The IMF General Data Dissemination System (GDDS, 1997) for member countries with less developed statistical systems is a framework for evaluating the countries' needs for data improvement and setting priorities. While 33 SIDS participate in the GDDS initiative, the

objectives are extremely demanding for small NSOs and the progress for participation are often slow¹⁸.

- **Results-based management is not widely adopted in many SIDS.** Evidence-based decision-making and development policy formulation is not a common practice. Decision makers rarely rely on data to make decisions, and because this is traditionally the practice, the NSS are not compelled to provide appropriate, timely and reliable data. Many SIDS were not required to join the PRSP, HIPC and MDR¹⁹ initiatives, and had no obligation to produce on a regular basis the set of data requested by any of the Bretton Woods Institutions. This perpetuates the lack of capacities of the NSSs to provide reliable statistics thus impacts on the image of the statistics institutions and limits the use of its products by decision makers.
- **Low statistical capacity and poor image of the NSO hinders its leadership and coordinative role in the NSS.** This results in lack of coordination and coherence of data within the NSS. The data needed to monitor and measure environmental dimensions of vulnerability may be difficult to collect and analyse. Statistics on natural resources, climate change, contamination, disasters and risks require access to sophisticated information systems and specialists. The exposure to risks of destabilization by external shocks is high, whereas the capacities to collect and analyse the requested information needed to prevent them or to face their impact appropriately is low.
- **Users play a very limited role in SIDS.** Demand for data from users is still weak in SIDS. This is apparent in weak political governance that favors the limited use of data and will not stimulate the promotion of a strong NSS.

The effect of smallness of NSSs also depends on the commitment, competency and leadership of the Chief Statistician and senior staff of the NSO, which is one of the critical features of more advanced statistical systems. However, this alone cannot compensate for the most important shortcomings linked to size.

Some of the statistical problems and challenges of SIDS linked to its small size were highlighted in a number of NSDS consultations: 1) outdated statistical legislation resulting in low compliance and lack of enforcement; 2) lack of autonomy of NSOs; 3) infrastructure and human resources are insufficient and underdeveloped; 4) coordination is weak with duplication of efforts, conflicting data and no established metadata; 5) erroneous interpretation of statistics is common; 6) infrequent and inconsistent conduct of surveys and delayed dissemination of survey results; 7) advocacy is low; 8) high rate of survey non-response; and 9) little use of statistics produced. These findings underscore the vicious cycle of low funding-weak statistics-weak demand. The low funding is significantly linked to the smallness of NSS in many SIDS.

The small size of SIDS NSS also highlights one striking dilemma that of its high dependence on external financing particularly for LDC and low intermediary income SIDS. In contrast however, NSS in high intermediary income country and those with relatively larger population source majority of their funds from the government (i.e., 95 percent of Jamaica NSO's budget were from the government).

¹⁸ IMF General Data Dissemination System (see <http://dsbb.imf.org/pages/gdds/countrylist.aspx>)

¹⁹ Poverty Reduction Strategy Paper; Heavily Indebted Poor Countries; Multilateral Debt Relief Initiative (2005).

3. RESPONDING TO THE CHALLENGES OF SMALLNESS AND VULNERABILITY OF SIDS NSS

The NSDS framework present specific responses to the challenges of smallness and vulnerability of SIDS NSS and certain adaptations are needed to address the unique case of SIDS.

3.1 PRIORITIES WITHIN THE NSDS FRAMEWORK

There are six (6) dimensions intimately linked to the NSDS approach that are particularly relevant for SIDS statistical systems:

- **Promote advocacy and political commitment for statistics.** As cited earlier, results-based management is not a common practice in a number of SIDS and decisions often do not benefit from statistical evidence²⁰. The status of NSOs in SIDS is generally low, and the resources allocated to the NSSs are insufficient and often very dependent on development partners especially in the conduct of censuses and major surveys. To reverse this situation, priority should be given to advocacy for statistics and results-based management. The most important beneficiaries of the advocacy approach should also be those who provide resources for statistics, such as the decision makers at the highest level. Advocacy should focus on the role of statistics in the development process and this could be done through the launching of the formulation of an NSDS which will set priorities in generating development indicators (with corresponding financial requirements) to monitor development policies and program, an ideal accompaniment to national development plans. Enlightenment of other data users and statistics stakeholders is also necessary such as those from the private sector and civil society. However, a strong political commitment to statistics is a prerequisite for the mobilization of government funds.
- **Strengthen the independence, transparency and integrity of the NSS.** The independence of the NSS from political interference and establishment of a strong governance system should be guaranteed in the statistical legislation with strong provisions on the participation of data users. Statistical legislation in SIDS countries must adhere to the UN Fundamental Principles of Official Statistics to ensure NSS' integrity. This will ensure a more positive image of the NSS that produces quality data fit for purpose. It will also assuage suspicion of bias in data production and analysis.
- **Coordination of data producers in the statistical system.** The NSS is often fragmented, poorly coordinated, and heterogeneous, with duplication of efforts, production of conflicting data, and have varying compliance to international standards. The NSDS approach provides a response to these shortcomings as it insists on a common vision for the statistical system and it involves all official data producers in the NSS to adhere to international standards. This may involve institutional changes in the NSS. The preparation of an NSDS will promote integration of the NSS as one of its major outcome.

²⁰ Proceedings of the consultative meetings conducted in SIDS countries in Pacific, June 2014; *"People are more accustomed to oral communication and discussion to find solutions to problems."* A Strategic Plan for the Statistical System of Anguilla- 2005-2009; Penny Hope-Ross, July 2004.

- **Establish a programming approach for statistics.** The NSDS output is an annual action plan with identified resources for the whole NSS, with adaptations linked to the national priorities of the government. The annual action plan must be presented to the main stakeholders (*inter alia* representatives of all official data producing agencies) along with the annual assessment of the previous action plan. A monitoring and evaluation system should be defined in the NSDS and then implemented.
- **Promote data analysis and dissemination as a priority activity of the NSS.** This involves the laying down of data dissemination and communication policy for the NSS. It entails the provision of quality and timely data responding to the needs of users, and easily accessible through the use of ICT. The improvement of the status of NSS is intimately linked to its capacity to disseminate and communicate data.
- **Foster dialogue with data users and producers.** The key feature of the NSDS approach is the consultative nature of the preparation and implementation of the strategy. This principle is fundamental in order to promote a demand driven statistical system. However, participation of users ought to take into consideration the smallness of SIDS NSS. The NSDS process is long-drawn, demanding and may be tedious for smaller SIDS NSS. Stakeholders may be reluctant to engage in the heavy process. The reluctance may be linked to the poor image of NSS, lack of awareness of the role of data users, or to the limited number of representatives of certain categories of users from private sector, media, academia, and civil society. Frequent appeals to a very limited number of qualified and legitimate stakeholders to take part in participative processes constitute a severe constraint in SIDS. In the preparation phase of the NSDS, reliance on the work of sectoral technical committees or working groups is common place²¹. Validation workshops take place at the end of each phase of the design process. Due to the limited number of qualified users available for participation, the NSDS road map for SIDS should be adapted, and the participative process may be limited to validation.

3.2 CHALLENGES LINKED TO SMALLNESS OF NSS: REDUCING THE COSTS OF PRODUCING STATISTICS

Majority of SIDS are unable to fund their NSS from domestic resources alone. The budget requirements needed to produce even a minimum set of data, let alone to build an NSS capable of delivering the data needs of users is beyond their means. Heavy dependence on external sources of funding for NSS operations is linked to the size and relative income of the SIDS. The cost of a standard survey is high even with a small population, due to the size of sample fractions needed to get reliable estimates. Moreover, the need for disaggregated data (i.e., by island) and the costs due to the dispersion of islands (archipelagoes) contribute to increased costs that are far beyond the resources that the country can mobilise through its budget. The constraint is much stronger for SIDS LDCs.

The cost of producing data should be reduced and there are three initiatives which could help achieve this:

²¹ As prescribed in the NSDS guidelines, the standard formulation/design period for an NSDS is more or less 12-18 months.

- **Systematic use of administrative data.** Administrative data can substitute for surveys and may provide precise information on an annual basis. Administrative data on education, health and vital statistics are potential sources of information for use in policy and development. But in most SIDS however, administrative data are not reliable, and/or not available on a timely basis. They are not produced according to internationally-agreed standards. Because of these shortcomings, specific efforts should be made in order to maximize use of these data. Efforts should include strong collaboration between the NSO and line ministries in-charge of administrative data to ensure adherence to acceptable standards of quality data production (e.g., adaption of existing classification systems and other data quality standards). Besides capacity building/training for producers of administrative data in line ministries, investment in hardware and software systems to collect and process data are likewise needed. The investment in training and equipment is needed to create a coordinated and technically unified NSS which offsets the cost for doing expensive surveys.
- **Promote cheaper ways to produce data.** SIDS should identify appropriate instruments to collect and process data that are compatible with the size of the countries and which will match their resourcing capacity. Promoting the use of innovative techniques in data collection and processing (e.g., multiple indicators surveys) could significantly reduce the costs of producing data. ICT should be appropriately used to optimize the costs of collecting and processing data. Partnerships with statistical research institutions and universities in coming up with more adapted instruments for SIDS may be beneficial.
- **Adapting international requirements to SIDS statistical capacity and needs.** The international community establishes development objectives and information frameworks needed to set up objectives (reference year) and to monitor and evaluate the strategies without taking into account the capacities of the NSSs. The annual monitoring of the MDGs requires very demanding sets of indicators that are very difficult for SIDS to comply with. Other similar frameworks such as the GDDS and Special Data Dissemination Standard of the IMF, while it foster good practices in data dissemination are likewise difficult for SIDS to subscribe to. Statistical frameworks such as the System of National Accounts (SNA) require complex data that are often impossible for SIDS NSS to generate. Thus, it hinders their adoption of the framework. The international data requirements and frameworks must acknowledge the capacity of SIDS to comply with these standards and frameworks and thus, certain adaptations must be made. This would help SIDS to generate the basic data required for policy decisions and development planning which are consistent with national priorities rather than purely as compliance to international demands.

3.3 SIDS VULNERABILITY AND THE NEED FOR STATISTICS

Vulnerability is one of the defining features of SIDS which creates specific concern for decision makers in terms of formulating appropriate development strategies. Three (3) dimensions of vulnerability would need considerable statistical information to help SIDS in their development policies and programming:

- **Environmental vulnerability.** Climate change, global warming, recurrent cyclones and other natural hazards, sea-level rise, and degradation of coastal and marine resources threaten SIDS, specifically atoll islands which are in danger of disappearing. Management of natural resources thus becomes a priority concern as well as prevention of risks related to environmental degradation and climate change. SIDS would require appropriate indicators on the environment and climate-related issues. Currently, very few environmental indicators, if

any at all, are generated in many developing countries, SIDS are no exception. Investment would need to be made in order to establish reliable statistical information systems on environment and climate-related indicators, including those relevant for disaster risk reduction and management.

- **Economic vulnerability.** Economic opportunities in SIDS are few and mostly rely on key industries such energy, tourism, agroforestry, agriculture and fishery. These industries are very competitive and have high degree of volatility as it is impacted by environmental and climate factors. Remittances, capital flows, and banking contribute to the economic growth of many SIDS, so does the informal sector, and exports of goods. Assessment of the NSS conducted in a number of SIDS points to weak or lack of indicators to measure contribution of these industries and sector to the economy which results in either underestimation or failure to account of its value. In most cases, economic policy decisions do not benefit from important statistical evidence. It must be understood that to mitigate economic vulnerability, SIDS would need adequate and frequent statistical information which are currently not available on a regular and timely basis.
- **Social vulnerability.** With relatively small population, SIDS are vulnerable to migration trends, health-related concerns such as communicable and non-communicable diseases, and poverty, among others. In many SIDS, in- and out-migration are unregistered. Trends in communicable and non-communicable diseases are not monitored, and there is dearth of information related to measuring poverty, hunger, labor, and access to social services. Appropriate indicators on these important social dimensions need to be generated to inform national policies and development programs.

Vulnerability of SIDS to economic, social and environmental factors also translates to statistical challenges for the NSS. The generation of indicators to monitor SIDS vulnerability and assess sustainable development progress would be as demanding for the SIDS NSS, if not more complicated than the monitoring of the MDGs. To better understand and address SIDS vulnerability, NSSs should have the capacity to collect, process, analyze and disseminate statistical information for policy and development planning use.

4. ROLE OF REGIONAL BODIES IN SIDS STATISTICAL DEVELOPMENT

Building and strengthening SIDS NSS would need considerable support from the international community on a long-term basis. It is a reality that the most statistically vulnerable and challenged NSS would continue to depend on external support to maintain an effective statistical system. These would be in the areas of human resource capacity building; institution building; technical assistance on frameworks, methodologies, standards, and tools; and investment in information systems and IT-related needs, among others. Regional bodies therefore play an important role in leveraging long-term support for statistical development in SIDS.

In Pacific and Caribbean, regional statistics cooperation was necessary to achieve the goals of regional integration and cooperation and a means to monitor progress and impact of

integration and guide overall regional development. The challenges faced by SIDS in meeting international reporting obligations (i.e., MDG monitoring) also necessitated a practical and coordinated regional approach to enhance reporting while reducing compliance burdens and transaction costs for SIDS.²² A regional approach to statistical development not only ensures effective NSS that contributes to national and regional decision-making but also fosters stronger cooperation and integration across the region stimulating economic growth, sustainable development, good governance, and mutual security.

Regional bodies that include statistical cooperation as part of their mandates provide much needed support to SIDS NSS, such as:

- **Augment statistical human resource needs of SIDS.** The smallest islands are constrained to undertake specialized statistical activities on specific concerns (e.g., population, labor, poverty) because of lack of expertise which forces them to seek support elsewhere. However, it is not always easy to engage statistical experts as it would entail considerable costs for the NSO. Transitional gaps in the statistical workforce due to high turnover or leave of absence of professionals also contributes to the problem severely disrupting statistical work in the NSS. Regional bodies often have a pool of statistical experts and professionals that could be dispatched to temporarily fill the human resource gap in the country or to carry out specific statistical activity on a short-term basis. The pooling of statistics professionals can rely on full time staff recruited and managed by the regional institution in charge of statistics.
- **Provide training and technical assistance to SIDS.** The capacities of the NSSs rely strongly on a permanent upgrading process of their staff in order to master new instruments, tools, techniques, and operationalize statistical frameworks and standards available. The permanent flow of innovation requires continuous and dedicated investment in training and SIDS NSSs do not have the resources to ensure this. Regional bodies could provide a common training session for several number of SIDS to minimise the training costs. Customized training session specific to country needs can also be facilitated by regional bodies particularly in the adoption of statistical standards, use of new software and statistical tools, and data dissemination, among others. Training support in the adoption of new frameworks, use of electronic devices to collect data, website management, design of an NSDS, database design and management, and questionnaire design and testing are some examples of requests that has been made by some SIDS NSOs. In general, solutions as far as training and technical assistance are concerned can be facilitated by regional bodies. Pooling of human resources and specialised skills at the regional level is an effective mechanism of support for SIDS.
- **ICT Infrastructure support.** Resources to upgrade much needed ICT infrastructure (e.g., computers, databases, software) to support statistical work in NSS is beyond the means of a number of SIDS. This is a serious obstacle to daily statistics work which also hampers communication with data users. NSOs rely on donor support in most cases as part of statistics projects (i.e., census or survey operation) to upgrade their computers and buy new software. Regional bodies provide support in terms of identification and provision of adapted equipment for use by NSS. In some instances, regional data processing facility is established using pooled resources from country contributions to aid NSS in data processing, analysis and storage of statistical information.

²² Joint Statement by Leaders of Pacific Islands Forum. UN Secretary-General SG/2191. 12 October 2012.

The Pacific and Caribbean regions have dedicated statistical programme/unit in their respective regional bodies (i.e., Secretariat of the Pacific Community and Secretariat of the Caribbean Community and Common Market or CARICOM) that are actively involved in the development of regional statistics thus providing much-needed statistical support to their SIDS members. On the other hand, in the AIMS region, the Indian Ocean Commission does not have a dedicated unit in-charge of regional statistical support or coordination. However, a few statistically-related activities are being conducted in the region focusing on specific areas of concern.

4.1 THE SECRETARIAT OF THE PACIFIC COMMUNITY (SPC)

The SPC (formerly the South Pacific Commission) was founded in 1947 to *“restore stability to a region that had experienced the turbulence of the Second World War, to assist in administering their dependent territories and to benefit the people of the Pacific”*²³. One of its core programme is on statistics development emphasizing the growing importance of statistics for informed decision-making in the region. The Statistics for Development Division (SDD) has a dedicated budget (approximately USD 4 million annual budget in recent years) for building NSS statistical capacities in Pacific SIDS. The budget comes from contributions of member states (around 15 percent) and from specific projects supported by development partners. The Government of Australia, through its annual contribution in the implementation of the Ten Year Pacific Statistics Strategy (TYPSS),²⁴ provides the biggest contribution to statistical development fund for the Pacific region.

SPC’s SDD has played an important role in the implementation of the TYPSS by providing much-needed training and technical assistance to Pacific SIDS. It serves Secretariat to the Pacific Statistics Steering Committee (PSCC) which was established to ensure implementation of the TYPSS Action Plan, in partnership and collaboration with other development and technical partners. The mid-term review of the TYPSS in 2013 revealed that it has contributed to higher level objectives of the Pacific Plan and the MDG monitoring and reporting requirements for Pacific Island Countries and Territories (PICTs). Further, it confirmed that measureable improvements in the availability and comprehensiveness of Pacific data have resulted from the action plan implemented in the region.²⁵

SPC, through its support role in statistical development in the Pacific, facilitated a number of programs and projects such as 1) establishment of a National Minimum Development Indicators

²³ <http://www.spc.int/en/about-spc/history.html>

²⁴ The TYPSS is a regional statistical development plan formulated as a consequence of the decision to adopt a regional approach to build national statistics that was approved by the Pacific Economic Ministers during its 2009 Forum Economic Ministers Meeting and later endorsed by the SPC Committee of Representatives of Governments and Administrations. The TYPSS regional approach to statistics is to maximize and coordinate available resources, provide regional strategic leadership to improve the scope and quality of national statistics.

²⁵ Pacific Statistics Strategy Action Plan Phase 1 (2011-2014) Mid-Term Independent Evaluation Report. 2013.

(NMDI)²⁶ database for the Pacific region; 2) establishment of the Pacific Regional Information System; 3) technical assistance in the conduct of the 2010 Population and Housing Census in Pacific countries; 4) establishment of a comprehensive multi-year household survey program²⁷; 5) design of a multi-indicator survey²⁸; 6) assistance in strengthening administrative databases and associated management information systems in key sectors such as education, health, and civil registration and vital statistics; 7) support to countries in the dissemination of spatial data through the use of geographic information systems (GIS) in population-related data (PopGIS); 8) management of a pool of regional statistical experts across key sectors (from various Pacific NSSs) for deployment on demand by other NSSs through the south-south technical collaboration²⁹; and 9) fostering of harmonization and coordination of statistics among PICTs. Focused support is also provided by SPC to the smallest NSOs in Pacific (5 countries with NSO staff of only 4 to 10) and those with high dispersion of islands and most vulnerable to climate change. Countries with small NSO are mostly in need of statistical skills' supplementation such as in survey design, data collection, processing, analysis and dissemination, web management, etc. It has also collaborated with PARIS21 in the design and formulation of NSDS in several Pacific countries.

4.2 CARIBBEAN COMMUNITY (CARICOM) SECRETARIAT

The Caribbean Community was founded in 1973 primarily to promote economic integration and to contribute to the creation of a single market and economy³⁰. A Standing Committee of CARICOM Statisticians (SCCS)³¹ was created in 1974 *“to foster increased recognition of the importance of statistical services to the countries of the region; widen the scope and coverage of statistical data collection; and improve the quality, comparability and timeliness of statistics produced”*. The role of statistics in the CARICOM region was influenced by its own mandates thus it adopted a regional approach to statistical development to ensure statistical information are available to guide and monitor the progress of integration towards improving the quality of life of the people of the Community.

The Regional Statistics Programme of CARICOM plays a major role in the coordination of statistics in its member states.³² Some of the successful projects and programs that facilitated

²⁶ NMDI is a web-based development indicator database that provides data users with a one-stop-shop to access broad range of Pacific statistics and indicators. It contains 206 indicators across 6 broad themes.

²⁷ The program was established with financial support from the Government of Australia and Asian Development Bank.

²⁸ The multi-indicator surveys such as the household income and expenditure survey in Vanuatu in 2012 was supported by the World Bank. This type of survey is aimed at significantly reducing the cost of data collection and processing by allowing the generation of various indicators in one survey.

²⁹ As part of the regional technical collaboration scheme, the NSS sends a pro-bono expert to another NSS in need of assistance, while SPC will fund the travel cost of the expert.

³⁰ The CARICOM Single Market and Economy objective was affirmed by member states of the Caribbean Community in 1989 as a response to challenges and opportunities in the global economy.

³¹ [http://www.caricomstats.org/Files/CARICOM_%20booklet%20\(2\).pdf](http://www.caricomstats.org/Files/CARICOM_%20booklet%20(2).pdf)

³² The CARICOM Regional Statistics Programme's mission is to develop a sustainable statistical infrastructure within the Secretariat to provide accurate, timely and reliable statistical information of high

improved statistics generation in the region include the following: 1) establishment of the TradSys Online³³, a regional information system on trade statistics which allow users to access detailed commodity level data of member countries; 2) dissemination of regional data through the CARICOMInfo³⁴ which contains compiled and harmonized member country statistics on foreign direct investments, national accounts, balance of payments, social and environment-related statistics; 3) design of a structured Common Census Framework³⁵ where common core questions were developed including harmonization of concepts, definitions, and processes and common dissemination tools for the 2010 Population and Housing Census; 4) adoption of the Regional Census Program³⁶ which involves the analysis and dissemination of census data and production of National Census Reports and Regional Special Topic Monographs; 5) development and updating of the Regional Statistics Work Programme (RSWP)³⁷ approved by the Community Council of Ministers and implemented with guidance from the Advisory Group on Statistics; 6) preparation of a Model Statistics Bill³⁸ to guide the formulation, review and updating of statistical legislation of member countries; and 7) establishment of common framework for data warehousing, archiving and storage.

Other statistical services provided by CARICOM include production of statistical publications on regional statistics, harmonization of statistical tools, sponsorship of high level advocacy forum to encourage data user engagement, promotion of strategic management and planning in statistics (NSDS formulation in partnership with PARIS21), provision of definition of minimum data set of indicators. Many of these statistical support services are incorporated in the redesign of the RSWP.

The Regional Statistics Programme of CARICOM has a core budget of USD 629,000 in 2013. Development partners provide additional resources for its implementation, albeit not on a

quality and broad scope, facilitating analysis and dissemination of these data, promoting their use in effective and efficient decision making and simultaneously fostering a similar enabling environment for statistical development among Member States of the CARICOM.

³³ TradSys Online was funded by the Inter-American Development Bank.

³⁴ CARICOMInfo is a database that contains development indicators in the region organized by sector, goals, themes in table, graph and map forms.

³⁵ The Common Census Framework is a unique regional coordination approach to statistics to ensure methodological uniformity and comparability of census data collected across member countries, a critical importance to monitor the CARICM Single Market and Economy and development across countries.

³⁶ The RCP is a regionally coordinated approach for the 2000 Round of Population and Housing Censuses to produce comparable, high quality socio-economic data useful in planning.

³⁷ The RSWP provides a platform for the structured and harmonised development of statistics and which sets the framework for the production of a common core of quality statistics in 5 domains: demographic and social statistics; economic statistics; environment and multi-domain statistics; methodology; strategic and managerial issues. It follows the format of the Classification of Statistical Activities of Europe but adapted to enable feasibility of implementation by identifying ongoing productive activities, development activities, very urgent, moderately urgent and least urgent activities in consideration of the small size of NSOs in the region.

³⁸ The Model Statistics Bill incorporates provisions on establishing an integrated national statistical system, transformation of the NSO into a corporate body, strengthening of the role of the head of the NSO as National Statistician, data sharing among national statistical agencies, anonymization of microdata, and statistics funding, among others

regular basis and mostly through projects with very specific objectives. In 2014 for instance, additional funds were mobilized from the European Union to support the RSWP amounting to USD 467,000. This resulted in a total budget of USD 1.083 million for the Programme.

5. RECOMMENDATIONS

Statistics is considered as one of the important enabling mechanisms in achieving sustainable development goals of SIDS. The role of statistics in development planning is clearly mentioned in the *Draft Outcome Document of the 3rd International Conference on SIDS*, highlighting that “*data collection and statistical analysis is required to enable effective planning, follow-up, evaluate implementation, and track success in attaining the international agreed development goals by SIDS.*”

Increased demand for data is inevitable in the Post-2015 era. Therefore statistical systems in SIDS and elsewhere would need to balance national, regional and international data demands and reporting requirements and to plan statistical development priorities. The following are some recommended strategies that could fast-track and sustain statistical development in SIDS in support of national development.

5.1 ADVOCACY AND POLITICAL COMMITMENT

There are relatively small number of government officials and parliamentarians in SIDS that make use of statistics in decision-making, policy formulation, or even political debates. Despite advocacy efforts on statistics by regional and international organizations, many SIDS still fail to see the value in incorporating results-based management framework in their governance systems. Thus, the demand for statistics is considerably low in SIDS.

Promoting statistics in support of development processes should be considered high priority in SIDS. The usefulness of statistics as a tool for policy and decision-making must be the central theme of any advocacy effort as this will potentially encourage high level support and help in improving the image of official statistics in SIDS. Advocacy program should target the highest positions in government so that awareness of the role of statistics would lead to political commitment in the reform and funding of the NSS. To effectively build and strengthen SIDS NSS, statistics literacy especially of the private sector, civil society, and media should likewise be improved.

Statistics advocacy is an integral part of the NSDS process – at the beginning, middle, and end stages. At the early stage of the NSDS process, advocacy must be made to high level government officials, ideally at the Prime Minister level with the inclusion of key ministries such as on planning and finance. Mid-stage, advocacy may target other data producing agencies, data users from government, private sector, and non-government organizations and this could be

done through data user-producer dialogues and consultations. At the end stage of the process, advocacy should target all stakeholders from the highest level government to civil society to encourage support in the implementation of statistical programs.

One effective way to justify support for statistics is to include in the national development strategy proclamations about statistics as an important input in monitoring and evaluation and in measuring achievement of the objectives of the development strategy.

5.2 LOWER THE COSTS OF COLLECTING, PROCESSING AND DISSEMINATING DATA

The costs associated to building a “standard” statistical system is out of reach for most SIDS. Surveys and censuses are common sources of data however the costs of conducting these activities are prohibitive for most NSSs and often would need to rely on external financing from development partners which becomes unsustainable in the long-run. Efforts should be made to reduce the costs of statistics in SIDS. There are two (2) ways this may be achieved:

- **Use of administrative data as alternative sources.** In most SIDS, administrative data from line ministries such as health, education, vital statistics, and agriculture are poorly used in development planning and policy formulation. When quality of administrative data is assured, these could be good sources of information and could partly substitute for costly survey data. It would also reduce respondent burden in countries with very small population. However, considerable improvement should be made to ensure that administrative data are fit for use. Consistency in definitions, adoption of classification systems, ensuring integrity of the numbers (free from political bias), statistical standards are upheld, and regular and timely release of data must be assured. Close relations and coordination between line ministries and NSOs and an integration process of all data producers in the NSS should also be established. It is important to invest in upgrading systems and processes which would include training of staff on standards and tools, acquisition of information systems such as GIS, and improvement in database management, among others. The long-term benefits of investing in administrative data would far outweigh the initial costs and would result in effective use of health, education, agriculture and vital statistics for development. Systematic efforts should therefore be made to include administrative data system in the NSDS as potential source of information for monitoring national development and in decision-making.

It is worth noting the current regional efforts in strengthening and using administrative data that is underway in the Pacific region – through the TYPSS and SPC-based *Regional Civil Registration and Vital Statistics Action Plan 2011-2014*, and a parallel regional initiative funded by the Australian Government (2014-2017) on establishing a regional technical Education Management Information Systems (EMIS) facility.

- **Adaptation of instruments used in data collection, processing and dissemination for SIDS purpose.** Methodological researches should be made in order to define less costly and more convenient approaches for surveys in SIDS. Multi-purpose surveys and adapted questionnaires have already been tested in Pacific SIDS and have resulted in substantial reductions in survey costs. A specific activities classification has been defined for Pacific countries. An optimal use of ICT for data collection, processing and dissemination can contribute to reducing costs. Partnerships with universities and research agencies are

recommended in order to identify and test appropriate and adapted statistical instruments taking into account the constraints linked to small populations and inadequate budgets.

5.3 ADAPT INTERNATIONAL REQUIREMENTS TO SIDS CONTEXT

International agreements and international and regional organizations require the provision on a regular basis of indicators covering a large variety of themes and responding to precise methodology and specific definitions. For instance, in the monitoring of the MDGs, most of the SIDS experienced difficulties in setting-up benchmark figures for most MDG indicators and for a long period were unable to provide the minimum data set needed for monitoring the goals. Requirements for monitoring international goals should be adapted to the requirements and needs of SIDS taking into consideration their development priorities and reporting capacities. The adaptation process could be driven at the regional level, with regional institutions providing support to SIDS and in close coordination with the NSS. It is recommended that for the Post-2015 sustainable development agenda, a specific monitoring and evaluation process for SIDS be defined, taking into account their development priorities and the capacities of their NSS.

5.4 DEVELOPMENT AND IMPLEMENTATION OF SIDS-SPECIFIC TOOLS TO ASSESS AND MONITOR THEIR VULNERABILITY

SIDS vulnerability has economic, social and environmental dimensions thus specific information system designed for collecting data that would measure impacts of vulnerability must be put in place. For instance, to monitor environmental vulnerability, a statistical system to collect data on environment and natural resources which many SIDS currently do not have, would need to be set-up, including systems to collect data to inform disaster risk management, climate change adaptation, waste management, and sustainable energy use. To measure economic vulnerability would require information on SIDS concerns such as on tourism, exports and imports of goods and services, money and banking, migration, remittances, among others. Statistical frameworks must also be in place to help SIDS monitor poverty, labor, health, education, food security, nutrition, gender, and culture-related concerns.

The long list of SIDS development priorities would require large sets of data which could be difficult to manage at the national level. Identification of core sets of indicators at the regional or sub-regional level to monitor specific SIDS vulnerability may be a feasible way of managing data requirements.

5.5 STRENGTHEN REGIONAL INSTITUTIONS WITH MANDATE ON STATISTICS COOPERATION

A number of SIDS, specifically the most vulnerable and challenged ones would need continuous statistical support to complement the capacities of their NSS. Due to their relative small size and

isolation, external support from regional and international institutions is inevitable. The regional statistical cooperation model in both Pacific and CARICOM proved to be effective in facilitating statistical development in SIDS. Pooling of resources (i.e., financial, human, infrastructure) at the regional level will help compensate for the limitations in SIDS NSSs.

The role of regional institutions with strong statistical cooperation mandate is important to sustain support to the most vulnerable SIDS. It is thus necessary for these institutions to have adequate funding to continue providing support to SIDS in need. It would entail a strong commitment of both member states and development partners to continue contributions to finance statistical work of the regional institutions. A concrete action plan for regional statistical cooperation and development that is aligned with SIDS development priorities is a good funding instrument where it would reflect the statistical needs of member states with regular monitoring and assessment of outcomes and emerging concerns. Part of strengthening regional institution's role in statistical cooperation would also involve continuous upgrading of staff skills of technical assistance providers especially on statistical frameworks, methodologies and standards that are useful for SIDS and expansion of pool of regional experts to provide support to SIDS NSS on-demand.

5.6 ESTABLISH STATISTICAL COOPERATION IN THE AIMS REGION

Unlike SIDS in Pacific and CARICOM regions, SIDS belonging in the AIMS region do not benefit from dedicated regional statistical cooperation. Only Comoros benefit from the assistance of AFRISTAT³⁹. It would be desirable to have a dedicated statistics cooperation unit in a regional body in AIMS to provide assistance to SIDS NSS in the region. Following the examples of Pacific and CARICOM, a similar coordinated regional effort in AIMS to build regional and national statistical systems could bring much needed statistical support for member countries.

One potential regional body in the AIMS region that could be tapped to provide coordinated regional statistical support for SIDS is the Indian Ocean Commission (IOC)⁴⁰. The IOC represents island states in international forum and lobbies for their specific economic and environmental interests. It also facilitates regional cooperation and integration specifically on the areas of environment, tourism, trade, fisheries, telecommunications, and cultural heritage.

5.7 PREPARATION OF AN NSDS

The Pacific and CARICOM regions have long recognized that NSDS is crucial to ensuring a strategic statistical development in SIDS is achieved. While SIDS NSS vary in their characteristics and capacities, the NSDS remains an effective framework for balancing priorities and demands

³⁹ Regional institution based in Bamako (Mali) with a mandate to promote statistics as a development tool in Francophone countries.

⁴⁰ The IOC is an inter-governmental organization founded in 1982 with the objective of promoting sustainable development of the Western Indian Ocean Islands. Member countries of the IOC include Comoros, France (Réunion Island), Madagascar, Mauritius and Seychelles.

for statistics in any NSS. The following recommendations thus aim to provide guidance to SIDS NSS in the design and implementation of their NSDS taking into consideration the size, vulnerabilities, and specific issues they face.

- **Strengthen governance of the NSS.** The credibility of an NSS is linked to the quality of its statistical products and services, capacity to provide the data needed by data users, and confidence of data users' in the statistics produced. A good statistical system is characterized by independence, transparency and integrity, often reflected in its statistical legislation. To ensure SIDS has a good statistical system, it should have in place a well-functioning governance system for the NSS.
- **Adopt a programming approach in statistical planning.** An annual action plan of statistical activities involving all data producers should be prepared and costed for the medium term (3 to 5 years). This is an important component of the NSDS.
- **Promote the dissemination of data.** The NSDS advocates for better data dissemination and open access to data and statistics in a regular and timely manner. Programs in the NSDS should include ways of improving availability and accessibility of data to users. The use of ICT enables extensive data dissemination that is easily accessible to users. Dissemination policy should also be in place for NSS.
- **Dialogue with data users.** The NSDS process involves consultation with data users and stakeholders to ensure that the NSS would respond to data users' needs. This consultative process is often overlooked when formulating statistical plans. It is necessary to identify key data users that would contribute meaningfully to discussions on data gaps, data quality, availability, and in setting statistical priorities.
- **Capacity building.** Many SIDS lack the capacity to produce and disseminate data needed by users. The NSDS approach will provide a diagnostic of the existing capacities, and identify the gaps to be addressed and how this could be done. A capacity building programme could then be defined. In the case of SIDS, the implementation of the programme should be coordinated and supported at the regional level, to ensure specific solutions may be identified such as common tools and pooling of resources.
- **Promote and strengthen south-south cooperation.** Limited statistical expertise in a SIDS country/territory should not be a deterrent from improving its statistical system. Regional south-south cooperation has been proven effective in building capacities of NSS. Even at the start of designing NSDS, sector experts in one SIDS country could be tapped to provide support in developing the sector statistics in another.

Not all SIDS have an NSDS in place that serves as framework for their statistical development. Annex Table 2 shows the status of NSDS in SIDS that are being monitored by PARIS21⁴¹. Out of the 25 SIDS in the PARIS21 monitoring framework, 44 percent do not have any NSDS in place; 24 percent are in various stage of implementation (some are expiring in 2014); 20 percent are currently in the design/formulation phase; and 12 percent have completed the draft NSDS and are awaiting adoption. For SIDS with limited resources and capacity to undertake statistical development activities, a light touch approach to NSDS formulation is recommended as this would help countries better define their statistical needs and what to prioritize. The design and effective implementation of an NSDS adapted to SIDS specificities should be one of the priorities in support of sustainable development goals at the national level.

⁴¹ PARIS21 monitors the status of NSDS in UDA borrower countries, least developed countries, and lower and lower-middle income countries (and some upper middle income countries in Africa). Some SIDS are not part of the PARIS21 NSDS monitoring framework if they do not fall within the above categories.

6. CONCLUSION

Now more than ever, the demand for statistics is higher, more and better data are needed to monitor national and international development goals. Countries would need to deliver on the growing and evolving demand for statistics.

Statistical challenges in SIDS are more complex as it is compounded by their relatively small size, vulnerability, and far greater resource constraints. However, despite the specificities of SIDS, they are still expected to generate statistics to track progress of their sustainable development. Innovations, new tools, and systems to improve data generation and dissemination could potentially help leap-frog SIDS statistical development but this should be buttressed by strong statistical system that have the capacity, knowledge and resources to manage the whole gamut of statistics operations and delivery of statistical information.

The preparation of an NSDS help guarantee that key dimensions in building and strengthening of SIDS statistical system that responds to the needs of users and to the development challenges of the countries will be taken into consideration. Adaptation of the NSDS framework and process to SIDS context is a priority consideration with specific modalities for a permanent dialogue between data producers and users.

NSDS in SIDS should also take into account the following specific issues:

- The need to strongly advocate for statistics in countries with no tradition of considering data as a prerequisite for decisions. This is a condition for the promotion of statistics as a priority in development and for a decisive commitment of policy makers, which conditions mobilization of funds and increased investment on statistics.
- The need for a coherent national statistical framework to address data gaps in informing policy frameworks and monitoring national development.
- The need to lower the costs of data collection, processing, and dissemination through systematic use of administrative data drawn from existing information systems (i.e., civil registration and vital statistics, health, education, etc.).
- The need to define instruments for generating/collecting statistics to assess and monitor the vulnerability (environmental, economic, and social) of SIDS.
- The need to establish and strengthen partnerships with universities and research institutions in order to contribute to innovations related to the use of ICT and instruments for monitoring vulnerability.
- The need to adapt information requirements of the international community to the constraints of SIDS (i.e., sustainable development goals).
- The need to strengthen partnerships between and among SIDS, development partners, regional bodies, and technical assistance providers to leverage knowledge and resources for improving statistical systems.
- The need to mobilize donors and to strengthen regional institutions with a mandate for statistics cooperation to complement efficiently NSS on a long term basis.

Annex Table 1. Selected Indicators on SIDS, by Geographical Region

Member ^{1/}	Land area (sq. km) ^{2/}	Population ^{3/}	Human Development Index ^{4/}	GNI per capita ^{4/}
The AIMS				
Cape Verde	4,030	498,897	0.636	6,365
Comoros	1,861	734,917	0.488	1,505
Guinea-Bissau	28,120	1,704,255	0.396	1,090
Maldives	300	345,023	0.697	10,074
Mauritius	2,030	1,296,303	0.771	16,777
Sao Tome & Principe	960	192,993	0.558	3,111
Seychelles	460	89,173	0.756	24,632
Singapore	700	5,399,200	0.901	72,371
The Caribbean				
Anguilla	NA	NA	NA	NA
Antigua and Barbuda	440	89,985	0.774	18,800
Aruba	180	102,911	NA	NA
The Bahamas	10,010	377,374	0.789	21,414
Barbados	430	284,644	0.776	13,604
Belize	22,810	331,900	0.732	9,364
British Virgin Islands	NA	NA	NA	NA
Cuba	106,440	11,265,629	0.815	19,844
Dominica	750	72,003	0.717	9,235
Dominican Republic	48,320	10,403,761	0.7	10,844
Grenada	340	105,897	0.744	10,339
Guyana	196,850	799,613	0.638	6,341
Haiti	27,560	10,317,461	0.471	1,636
Jamaica	10,830	2,715,000	0.715	8,170
Montserrat	NA	NA	NA	NA
Puerto Rico	8,870	3,615,086	NA	NA
Saint Kitts and Nevis	260	54,191	0.75	20,150
Saint Lucia	610	182,273	0.714	9,251
Saint Vincent & the Grenadines	390	109,373	0.719	10,339
Suriname	156,000	539,276	0.705	15,113
Trinidad & Tobago	5,130	1,341,151	0.766	25,325
U.S. Virgin Islands	350	104,737	NA	NA
The PACIFIC ^{5/}				
American Samoa	199	56,500	NA	NA
Commonwealth of the Northern Marianas	457	55,600	NA	NA
Cook Islands	237	15,200	NA	NA
Fiji	18,333	859,200	0.724	7,214
French Polynesia	3,521	261,400	NA	NA
Guam	541	174,900	NA	NA
Kiribati	811	108,800	0.607	2,645
Marshall Islands	181	54,200	NA	NA
Federated State of Micronesia	701	103,000	0.63	3,662
Nauru	21	10,500	NA	NA
New Caledonia	18,576	259,000	NA	NA
Niue	259	1,500	NA	NA
Palau	444	17,800	0.775	12,823
Papua New Guinea	462,840	7,398,500	0.491	2,453
Samoa	2,934	187,400	0.694	4,708
Solomon Islands	28,000	610,800	0.491	1,385
Timor-Leste	14,870	1,178,252	0.62	9,674
Tonga	749	103,300	0.705	5,316
Tuvalu	26	10,900	NA	5,151
Vanuatu	12,281	264,700	0.616	2,652

Note:

1/ SIDS list of members based on list of UN DESA Division of Sustainable Development. <http://sustainabledevelopment.un.org/index.php?menu=1520>

2/ 2013 data from World Bank. <http://data.worldbank.org/indicator/AG.LND.TOTL.K2>. Excluding Pacific countries and territories.

3/ 2013 data from World Bank. <http://data.worldbank.org/indicator/SP.POP.TOTL>. Excluding Pacific countries and territories.

4/ Human Development Report Statistical Tables 2014 (Table 1).

5/ Land area (in sq.km) and population data for Pacific Islands sourced from Pacific Island Populations 2013 Fact Sheet.

Annex Table 2. Status of NSDS in SIDS

SIDS	NSDS status
<i>AIMS Region</i>	
1. Cape Verde	Being implemented
2. Comoros	Being implemented
3. Guinea-Bissau	No NSDS
4. Maldives	Being implemented
5. Mauritius	Design in progress
6. Sao Tome and Principe	Being implemented
7. Seychelles	Completed, awaiting adoption
<i>Caribbean Region</i>	
8. Belize	No NSDS
9. Dominica	Design in progress
10. Grenada	Design in progress
11. Guyana	No NSDS
12. Haiti	No NSDS
13. Saint Lucia	No NSDS
14. Saint Vincent and Grenadines	No NSDS
<i>Pacific Region</i>	
15. Fiji	No NSDS
16. Kiribati	No NSDS
17. Marshall Islands	No NSDS
18. Federate States of Micronesia	No NSDS
19. Papua New Guinea	Design in progress
20. Samoa	Being implemented
21. Solomon Islands	Design in progress
22. Tonga	Completed, awaiting adoption
23. Tuvalu	No NSDS
24. Vanuatu	Completed, awaiting adoption
25. Timor Leste	Being implemented

Source: NSDS Progress report, March 2014.



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