National workshop on Environment Statistics in Namibia

Windhoek, Namibia

3-5 December 2019

WORKSHOP REPORT

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Background, objectives and overview of the workshop

1. The United Nations Statistics Division (UNSD) in collaboration with the Namibia Statistics Agency (NSA) organized a National Workshop on Environment Statistics in Windhoek, Namibia from 3 to 5 December 2019. It was attended by 34 participants (11 females and 23 males) from diverse national institutions including the NSA, Ministry of Environment and Tourism (MET), Ministry of Agriculture, Water and Forestry (MAWF), Office of the Prime Minister (OPM), United Nations World Food Programme (UNWFP), Namibia Professional Hunters' Association (NPHA), Namibia Nature Foundation and Namibia University and others (for a complete list please see Annex I). The 3-day workshop was co-chaired by Ms. Saara Niitenge (NSA) and by Mr. Amon Andreas (MET).

2. The main aim of the workshop was to enhance the profile of environment statistics through the Framework for the Development of Environment Statistics (FDES 2013) and build the capacity in this subject area in the country, by bringing the stakeholders together to assess work undertaken by Namibia and to provide hands-on training on priority topics such as climate change, water, waste, land, biodiversity and forest statistics. These topics were discussed in the context of reporting obligations under the corresponding Multilateral Environmental Agreements (MEAs) and the environmentally-related Sustainable Development Goals (SDGs).

3. The workshop consisted of a series of experts' presentations, sharing of and discussion of lessons learned from country practices and facilitated group discussions. UNSD presentations covered the conceptual foundation and the structure of the FDES 2013, strategic pillars and steps to implement the FDES 2013, and details of environment statistics particularly relevant for the region. This included in-depth training sessions on selected priority topics, including land, water, climate change, forest and biodiversity statistics. As a result of the training sessions and discussions, the workshop participants adopted a set of recommendations, including: NSA to establish a stronger environmental statistics unit by bridging resources from SDG and GIS (NSDI) teams; NSA and MET to coordinate how to make best use of the existing NSDI at NSA to incorporate all relevant stakeholders data; NSA, MET to collaborate with the Chamber on Environment, NPHA and other groups to produce national statistics and accounts on biodiversity, ecosystems and their services; and NSA to participate in the UNSD Pilot Survey and Global Consultation on Climate Change Statistics and Indicators, in collaboration with all relevant stakeholders. FDES 2013 supporting materials, such as the Environment Statistics Self-Assessment Tool (ESSAT), were also presented and discussed.

Opening session

4. In his opening address, Mr. Alex Shimuafeni (Statistician General of NSA), welcomed all participants and acknowledged the support for this event provided by UNSD. He also emphasized the importance of coordination between the NSA and other organizations and the need to be committed to a broader system of environment statistics which can contribute to policy formulation that integrates environment and economy. Both the Statistician General and the Deputy of the NSA were present at the opening of the Workshop.

5. Mr. Olimpio Nhuleipo (Deputy Director, MET) welcomed and thanked the participants for attending the workshop. He emphasised that there is a need to collect environmental statistics to readily inform policy development to be used in decision making. He also mentioned the Environmental Management Act No. 7 of 2007 which requires the country to monitor and report on its state of the environment. He further encouraged all stakeholders present to collaborate and offered thanks to UNSD.

6. In his welcoming remarks, Mr. Emil Ivanov (Statistician, UNSD) thanked the participants for attending the workshop and for contributions made by the NSA so far. He stated his wish for the workshop to be a success in strengthening environment statistics in Namibia.

Summary agenda

Session 1: Introduction to environment statistics
Session 2: Environment statistics in Namibia
Session 3: Sustainable Development Goals and environment statistics
Session 4: Technical training on Environmental Conditions (FDES Component 1)
    Session 4.1: Environmental Conditions (FDES Component 1): Land Cover
    Session 4.2: Environmental Conditions (FDES Component 1): Ecosystems and Biodiversity
Session 5: Technical training on Environmental Resources (FDES Component 2) and Residuals (FDES Component 3)
    Session 5.1: Water statistics, including wastewater (FDES Component 2, SDG 6)
    Session 5.2: Forest Statistics (FDES Component 2, SDG 15)
    Session 5.3: Waste statistics (FDES Component 3)
Session 6: Climate change and disasters statistics
Session 7: Technical training on climate change indicators (cross-cutting FDES theme, SDG 13)
Session 8: Way forward

A full and detailed agenda is provided in Annex II of this report.

Session 1: Introduction to environment statistics

7. Mr. Ivanov and Ms. Carrington (UNSD) presented an Overview of the FDES and its implementation tools: Basic Set, Methodology Sheets, ESSAT; data collection methods; geographic information systems (GIS) and earth observation; compilation of statistics; and quality control and validation of environment statistics. They explained the conceptual foundation, structure and contents of the FDES 2013, the structure and contents of the methodology sheets (of the Manual on the Basic Set of Environment Statistics) and the intended audience (NSOs, MoEs, other agencies and international agencies). Corresponding to selected topics or themes, the methodology sheets include definitions of statistics, classifications, sources of guidance, recommendations and data international databases, and the relationship to the System of Environmental-Economic Accounting (SEEA) and the SDGs.

8. Following the introduction, questions were directed to UNSD to clarify the level of difficulty and efforts required to compile the statistics included in the FDES structure which is the one recommended for countries to organize their environment statistics. It was suggested that a country should endeavour to select and apply the most relevant and needed statistics, in particular, starting with those designated as Tier 1. Further questions were raised on linking these environmental statistics with National Accounts to which the response indicated that one should develop the basic statistics intended for multiple purposes, and gradually progress towards environmental–economic accounting when the basic data is sufficiently advanced for this purpose.

Session 2: Environment statistics in Namibia

9. Ms. Saara Niitenge (NSA) presented an overview of the ongoing processes and existing environment statistics in Namibia. An assessment of the initial situation was the first step of a work programme which started in February 2018. She further mentioned that Mr. Mally Likukela

was appointed as a consultant to support the NSA for developing a National Action Plan (NAP) and a national compendium on environmental statistics. She specified that the compendium is under review and not yet finalised. The NAP was also available as a draft version. A compilation of data for Namibia from international sources was shared for comparison amongst the stakeholders with the expectation that the data gaps will be filled, and ongoing work will be strengthened.

10. Mr. Mally Likukela presented the contents of the National Action Plan for Strengthening of the Environmental Statistics in Namibia and the draft Environment Statistics Compendium. He stated that the objective was to develop a coherent, reliable and efficient inter-sectoral statistical system which will strengthen the human resources capacity for collection, production and dissemination of environment statistics. He noted that efforts are needed to bridge the gap between public and private organizations engaged in environmental data, to improve the data quality and to reduce costs of data production via improved coordination and mainstreaming environment into the NSS. Ultimately, this will increase awareness and the profile of environment statistics in the country.

11. Mr. Olimpio Nhuleipo (MET) presented progress on the processes of producing State of the Environment Reports in Namibia. Several were done with the help of a consultant, in 2000, 2004 and 2015. He stated that the MET's Department of Environmental Affairs is mandated to produce these reports and that data gaps represent a significant challenge, so formalized exchange and data sharing is a key objective. He mentioned that the latest report is under review and not yet available for dissemination at this time. He shared the proposed thematic areas and showed examples (SDG related).

12. The plenary discussed the draft compendium and NAP and stressed that strategic objectives should include: improving the coordination with the private sector (inclusive of NGOs and research entities) by establishing a collaboration between the private sector and government/statistics offices; a shared responsibility (committee) to ensure that each member provides the needed data on a timely basis adding to the value of the ongoing work. It was also proposed that the timeline be extended to next year since the compendium is still in draft and some of the data gaps can be filled using the administrative records and other sources. It was further stated that collaborative efforts will be required from each of the stakeholders to be engaged in official statistics. The MET stated that the discussion on the NAP was very positive and reiterated that the NSA has already started the process of capacity building and engaging with other institutions (including those in the private sector). It was concluded that the NSA will play an important role in ensuring that the information/data produced meets the required standards.

Session 3: Sustainable Development Goals and environment statistics

13. Mr. Ivanov (UNSD) presented an overview of data reporting requirements for MEAs and SDGs. He demonstrated the link between the FDES 2013 and the environmentally-related SDG indicators. He explained that the FDES can help to address the issue of a single SDG indicator requiring multiple statistics to be calculated. He presented the matrix with the correspondence between the Basic Set of Environment Statistics and environmentally-related SDG indicators. He also made participants aware that some SDG indicators require multiple statistics as inputs and for that reason, the matrix also helps as a more comprehensive guide, including where the SDG indicators are tier 2 or 3.

14. Dr. Isak Neema (Executive for Data Quality Assurance and National Statistical System Coordination, NSA) presented the progress of work on SDGs in Namibia, in particular focussing attention on the environmental indicators (https://sdg.nsa.org.na:4000/). Participants were

informed that Namibia was a member of the High-Level Committee that developed a Common Africa position on the Post-2015 Development Agenda and that the SDGs were adopted through a domestication process in NDP5. It was coordinated via the Development Partners Forum, Multi-Stakeholders National Steering Committee and NPC. In addition, the NSA's contribution is to set up a national SDG Monitoring System. He concluded that the existing data gaps cannot be quantified at this stage and that the work on data collection is continuing. There is a need for the integration of SDG indicators into surveys, census and administrative records; formalization of data exchange between national stakeholders and enhanced data disaggregation at all levels to ensure that the 'leave no one behind' principle is comprehensively covered.

Session 4: Technical training on priority topics on Environmental Conditions

Session 4.1: Land cover and Land use

15. Mr. Enrico Bezuidenhoudt (NSA, GIS Analyst) presented ongoing work on developing national land cover data and statistics within the National Spatial Data Infrastructure (NSDI) http://geofind.nsa.org.na/. A working group was set up for the purpose of developing an agreed National Land Cover Classification System for Namibia. Other fundamental themes forming part of the NSDI are structured in a data cube, including geographic names, addresses, buildings and settlements, land parcels, transport network, geology and aerial imagery. Currently, land cover data is used for quantifying GHGs, monitoring land degradation, land use planning and environmental protection. However, the lack of agreed definitions of key classes, such as forests, obstructs the quantification of statistical timeseries (e.g. consistent land cover changes) and also reporting to MEAs and SDGs.
16. Land-use and land-cover statistics in the FDES were introduced by Mr Ivanov (UNSD). He demonstrated how geospatial information adds value and utility to environment statistics; outlined the main concepts and definitions on earth observation and provided explanations of other terms. While referring to the methodology sheet on land cover, the necessity for land statistics was explained. The relevance of land cover statistics was emphasized due to the large number of SDG indicators that need land statistics in their compilation.
17. Discussions following the two presentations explained further details on land cover, e.g. the planned products will be based on Sentinel 2 with sufficient spatial detail to reflect on major land cover changes, for example such that take place because of restricting fire and grazing which promotes the growth of bushes, which pose increased risks of fires etc. The participants then completed an exercise on validating land-cover and recommended that further work should be carried out on the subject.

Session 4.2: Ecosystems and Biodiversity

18. Mr. Amon Andreas (MET) presented national work on biodiversity and ecosystem services. He explained the roles of the Multilateral Environment Agreements (MEA) division within the Department of Environmental Affairs. There are also units on Biodiversity and Sustainable Land Management (focal points to UNCBD and UNCCD) and a Climate Change Unit (focal point to UNFCCC). He further informed the plenary on the planned biodiversity data and information strategies and the challenges in establishing a Biodiversity Repository Site as well as the Mapping the Biodiversity Priorities which all need dedicated teams of various expertise.
19. Ms. Juliet Perche (Namibia Nature Foundation) gave a brief overview on the Environmental Information System (EIS) [http://www.the-eis.com], report on State of Community Conservation

in Namibia (NASCO) and Atlas of Namibia which is managed and updated annually by Namibia Chamber of Environment.

20. Ms. Tanja Dahl (Namibia Professional Hunting Association) presented on wildlife management experience, including the rebound of wildlife numbers (from lowest in the 60s). Namibia is one of the countries with the highest rate of wildlife recovery in the region (and possibly in the world) in which trophy hunting played a big role. She also explained the methods (counts of animals filmed on cameras) and results from the last Leopard Census which triggered discussions related to previous efforts to count the species (by MET) for the purpose of its conservation. This case provided a strong example on the need to establish public-private partnership for wildlife data.

21. The methodology sheet on ecosystems and biodiversity statistics in the FDES was presented by Mr. Ivanov (UNSD). These types of statistics which are used for policy purposes relate to the Aichi Biodiversity Targets and the SDGs 6, 14 and 15 where data is needed on ecosystems and biodiversity. For the FDES, spatial data is useful in counting species, population size and distribution. An explanation of how the International Union for Conservation of Nature (IUCN) calculates its Red List Index (an indicator in trends in species' extinction risk) was shared with the participants.

22. Further discussions addressed issues like what are the best ways for the stakeholders to collaborate given that multiple persons within the various entities have to be engaged to ensure a well-coordinated provision of statistics. Concern was expressed regarding situations where data sharing may be obstructed for various reasons. Suggestion was made to set up a working group or committee whereby multiple institutions could have a repository of data, and whereby stakeholders can view/ house such data.

Session 5: Technical training on Environmental Resources and Residuals

Session 5.1: Water Resources

23. Ms. Geraldine Diergaardt (MAWF) gave a presentation on Namibia's national experience on water statistics. She described the water supply scheme, sanitation and coverage in Namibia, wastewater treatment, and water quality monitoring. She explained that there is no data collection framework present; there are data gaps; and there is a huge need for capacity building, as well as collaboration with the NSA.

24. Mr. Obert Mutumba (UN-WFP) demonstrated an information platform, including an Early Warning System (based on NDVI) set up to assist countries in the region to assess drought risks from climate change.

25. The application of the FDES to water statistics was presented by Ms. Robin Carrington (UNSD). She gave an overview of the relation between water in the FDES components, sub-components and topics. She described the main issues related to water and the environment, including the quality and access to potable water, pressures on water supply, water-borne diseases, waterlogging and salinization of soils, etc. She also described the relationship between water abstraction, distribution, use and returns. The topics that relate to water under Components 1 to 6 in the FDES and their relationships were presented. The structure of the methodology sheet on water resources statistics was also explained including references to SDGs, and the water section of the UNSD/UNEP Questionnaire on Environment Statistics.

26. Discussions following the above presentations explained the unique situation of Namibia in terms of water scarcity, the high rates of water reuse, etc. It was noted that further regulations

are needed to improve water management, including wastewater treatment and disposal. MET has completed water asset accounts, which noted the lack of data on groundwater.

27. An exercise using ESSAT Part II was completed by the participants, which aimed to assess the water-related statistics across the six components of the FDES. The participants reported back to plenary that the ESSAT, Part II was very engaging. It facilitated discussions among institutions on where the source for various environment statistics lies within Namibia. Participants also commented that the ESSAT, Part II should be used for updating and monitoring environmental statistics in the country.

Session 5.2: Forest Statistics

28. Mr. Tangeni Veshiyele (MAWF) presented national work on forestry statistics. He explained Namibia's forest management; forest status in 2019; forest protection issues; and forest areas and products. He further stated that only limited information about forestry is available in Namibia and that the forestry data gap is huge. He recommended that there is a need for thematic forest studies; NSDI needs to be fully utilized; sectoral statistics units should be informed about all data collection taking place within their sector by international bodies; and a need for capacity building.

29. Forest statistics in the FDES were presented by Mr. Ivanov (UNSD). The presentation covered key messages and figures emphasising the importance of forests, polices and SDGs that require forest data and statistical guidance contained in the Manual on the Basic Set of Environment Statistics - methodology sheet on forests. International sources of forest data have limited applicability in Namibia because of the structure of the arid forests in the county which are not well captured in international sources.

30. Discussions explained further how community forests were set up as a means to better manage and protect them as well as to recover them from damages such as bush encroachment. It was noted that community forests in Namibia do not match international definitions of a forest.

Session 5.3: Waste statistics

31. Mr. Moses Ashipala (COW) presented the practices of Solid Waste Management in the City of Windhoek. He stated that their vision is to be a world-class solid waste management service provider to the citizens and become the cleanest city in the World by 2030. He made note of the disposal facilities; monthly waste statistics and their components; household refuse removal; recycling at the household level; operational systems; communal recycling stations; landfill sites and other disposal facilities. He also noted that a big part of the population of Windhoek resides in informal settlements which are not part of the waste management system.

32. The UNSD training module on waste statistics was presented by Ms. Robin Carrington (UNSD). She described Component 3 of the FDES that covers residuals and contains statistics on the amount and characteristics of residuals generated by human production and consumption processes, their management and their final release to the environment. She also noted that the management of waste covers the amount of waste collected and transported, treated and disposed of by type of treatment and disposal; the number and capacity of treatment and disposal plants, among other information relevant to waste management. Finally, the

presentation briefly described the methodology sheet on waste and the waste section of the UNSD/UNEP Environment Questionnaire on Environment Statistics.

33. After notifying that Namibia did not submit a completed UNSD/UN Environment Programme Questionnaire, a question referring to the amount of time needed to complete the Questionnaire was posed. Participants mentioned that an assessment on the state of waste in the country is needed. They also mentioned that basic infrastructure is needed for waste collection and that the municipalities need more guidance and technology for collecting and treating waste. It was noted also that the spatial data prepared by the NSA will be beneficial and that involvement of urban planning in the work on waste statistics is needed.

Session 6 and 7: Climate Change and Disasters Statistics

34. On-going work on a global set of climate change statistics and indicators was presented by Mr. Ivanov (UNSD). A short history of the work on climate change statistics and its cross-cutting link to the FDES were introduced. It was mentioned that the sequence of climate change indicators is based on the IPCC guidelines. The ongoing work on a global set of climate change indicators was also explained. There are about 7,500 country-sourced indicators related to drivers, impacts, mitigation, adaptation and vulnerability, many of them repeated. These indicators come from publications from various national bodies. The final number of indicators has not been decided yet but should be comprehensive and applicable to all countries. A core set was suggested that would be simple to measure along with additional indicators that are region or nation specific. UNSD plans to conduct a Pilot Survey and the Global Consultation of the climate change statistics and indicators in 2020.

35. Work on disaster risk management in Namibia was presented by Mr. Ileni Simon (Office of Prime Minister) which is based on a vulnerability assessment analysis of the entire population in the country. The main objective is to assess the food security and livelihood vulnerability in space- and time-explicit terms, applying an Integrated Phase Classification (IPC) method. Population data from NSA is used for the purpose of producing annual statistics on affected population (ranging between a quarter and a third of all population in Namibia). Further issues include human-wildlife conflicts, loss of income and animal disease outbreaks.

36. Further discussions on climate change indicators and statistics took place in work groups addressing the list of preliminary indicators prepared by UNSD. Feedback provided to plenary mentioned that the statistics and indicators should be accompanied with technical guidance and metadata. Environment statistics are of special importance to inform actions and policies aiming to alleviate food insecurity related to droughts (coupled with poverty and unemployment) in Namibia. Such statistics include: access to food (own production, imports), rainfall patterns (delays), soil type, level of land degradation, vegetation cover, as well as the responses from government and international organizations. National policies including restriction of access to wildlife resources make some indigenous communities more vulnerable to food insecurity.

Session 8: Way forward, recommendations and closing remarks

37. The participants expressed appreciation of the workshop contents and provided suggestions for improvement of the training programme and materials. The plenary recommended the following key actions for stronger and coordinated production of environmental statistics in Namibia:

Recommendations from the Workshop

i. NSA to prioritize and establish an environmental statistics unit by bridging resources from SDG and National Spatial Data Infrastructure (NSDI) teams.

ii. NSA to continue coordinating with MET to establish the best way the work on environmental statistics that should be steered among the different institutions. There is an Environmental Sector Statistics Committee composed of three MET directorates, but since Environmental statistics is cross cutting, the ideal situation is to have the inter-ministerial Environmental Statistics Task force / Steering Committee provide direction and resources for the compilation of Environmental statistics and capacity building (NSA, MET, MAWF, Lands, Mines and energy, urban and rural development, etc.)

iii. NSA and MET to coordinate the use of the existing NSDI at NSA to incorporate all relevant stakeholders' data. A task force (including tertiary institutions) to be established to discuss where input data should be hosted and to define what further capacity is needed to manage it.

iv. NSA to complete the National Action Plan with possible revisions and extensions to ensure that it covers the National Statistics System for environment statistics, including the task-force mentioned above.

v. NSA to finalize the draft compendium, to distribute it to the participants, and encourage them to supply or validate information for the draft compendium. NSA to periodically produce and publish future compendiums/reports in line with the FDES.

vi. NSA to complete the UNSD/UNEP Questionnaire on Environment Statistics in collaboration with the relevant stakeholders.

vii. NSA (via Government) to prioritize environment data collection and statistics, which needs to mobilize funds and human resources (including tertiary institutions) ensuring sustained processes. NSA to coordinate capacity development across the NSS and NSDI on improved environmental data collection, data management, data analysis and data dissemination.

viii. NCRST to publicize the national research agenda and calendar, to communicate research studies results to NSA and MET. MET to coordinate with three committees (for CBD, CCD and CCC) to share their research agenda and activities with NCRST.

ix. NSA and MET to work with Ministry of Agriculture (water affairs) and NAMWATER corporation to produce national statistics on water, that can further be used for water accounts and UNSD Questionnaire on Water Statistics.

x. MET together with NSA to collaborate with the Namibian Chamber of Environment, Hunters Association and other groups to produce national statistics and accounts on biodiversity, ecosystems and their services.

xi. Ministry of Urban and Rural Development to prioritize the collection of statistics on informal settlements. Solid Waste to continue working on future waste landfills and management/recycling.

xii. NSA to start disseminating environmental statistics on the existing SDG/NSDI platform.

xiii. Data producers are encouraged to provide metadata along with the data to any users of the data.

xiv. NSA to participate in the UNSD Pilot Survey and Global Consultation on Climate Change Statistics and Indicators, in collaboration with all relevant stakeholders.

Annex I: List of Participants

No.	Title	Surname	Name	Institution	Position
1.	**Mr.**	Andreas	Amon	MET	Senior Conservation Scientist
2.	**Mr.**	Bezuidenhoudt	Enrico	NSA	GIS Analyst
3.	**Ms.**	Carrington	Robin	UNSD	Senior Statistics Assistant
4.	**Ms.**	Dahl	Tanja	NAPHA	CEO
5.	**Ms.**	Hamunyela	Ndapunikwa	NSA	Statistician
6.	**Mr.**	Haraseb	Ben	MAWF	Deputy Director
7.	**Ms.**	Iduwa Mbaya	Aina	OPM	Senior Administration Officer
8.	**Mr.**	Ilungu	Sem	MFMR	Economist
9.	**Mr.**	Ivanov	Emil	UNSD	Statistician
10.	**Ms.**	Kadhikua	Ndapandula	NSA	Assistant Statistician
11.	**Mr.**	Kanyetu	Johannes	GIZ-BMCC	Junior Technical Advisor
12.	**Mr.**	Likukela	Mally	TCC	Consultant
13.	**Mr.**	Lubinda	Mwala	NUST	Lecturer
14.	**Mr.**	Moses	Ashipala	CoW	System Analyst
15.	**Dr.**	Mowa	Edgar	NCRST	Program Officer
16.	**Ms.**	Muituti	Ivy	MET	Economist
17.	**Mr.**	Mutumba	Obert	WFP	Program Officer
18.	**Ms.**	Mwazi	Ottilie	NSA	Deputy SG
19.	**Ms.**	Nakale	Cecilia	MFMR	Chief Administration Officer
20.	**Mr.**	Nathanael	Benyamen	NCRST	Scientist
21.	**Mr.**	Ndjamba	Johannes	NCRST	Program Officer
22.	**Dr.**	Neema	Isak	NSA	Executive
23.	**Mr.**	Nhuleipo	Olimpio	MET	Deputy Director
24.	**Ms.**	Niitenge	Saara	NSA	Statistician
25.	**Ms.**	Perche	Juliette	NNF	Economist
26.	**Ms.**	Prickett	Maike	CEO	GIS Specialist
27.	**Mr.**	Sheetekela	Victor	MFMR	Economist
28.	**Mr.**	Shigwedha	Absalom	Freelance	Journalist
29.	**Mr.**	Shigwedha	Veikko	MET	Economist
30.	**Mr.**	Shimuafeni	Alex	NSA	Statistician General
31.	**Mr.**	Simon	Ileni	OPM	Senior Administration Officer
32.	**Mr.**	Tsheehama	Aloysius	NSA	Manager
33.	**Mr.**	Uazukuani	Uazukuani	Wetu	GIS Analyst
34.	**Mr.**	Veshiyele	Tangeni	MAWF	Statistician

Annex II: Agenda

National workshop on Environment Statistics in Namibia

Tuesday 03rd - Thursday 05th December 2019

Final Agenda

Venue: Roof of Africa Hotel, Restaurant & Conference Centre, Windhoek

Tuesday 3 December 2019

08:30-09:00 Registration of participants

09:00-09:30 Opening of the workshop

- Namibia Statistics Agency
- Ministry of Environment and Tourism
- United Nations Statistics Division

09:30-10:00 Objectives and organization of the workshop

- Introduction of participants
- Presentation and adoption of agenda

10:00-10:30 Coffee break

10:30-12:00 Session 1: Introduction to environment statistics

- Overview of FDES and implementation tools: Basic Set, Methodology sheets, ESSAT (UNSD, 20 min)
- Data collection methods (UNSD, 10 min)
- GIS and Earth observation (UNSD, 10 min)
- Compilation of statistics (UNSD, 10 min)
- Quality control and validation of Environment Statistics (UNSD, 10 min)
- Discussions (30 min)

12:30-14:00 Lunch

14:00-15:00 Session 2: Environment statistics in Namibia

- Overview of Environment statistics assessment in Namibia (NSA)
- Overview of draft on Environment statistics compendium (NSA Consultant)
- National Action plan of Namibia (NSA Consultant)
- State of Environment Report (MET)
- Discussion on compendium data validation with the relevant institutions

15:00-15:15 Coffee break

15:15-16:30 Session 3: Sustainable Development Goals and environment statistics

- Environment statistics for reporting on the Sustainable Development Goals (SDGs) and Multilateral Environmental Agreements (MEAs) (UNSD)
- Examples from Namibia: (NSA {SDG Team/NPC})
- Discussion

Wednesday 4 December 2019

Session 4: Technical training on Environmental Conditions (FDES Component 1):

08:30-09:45 4.1 Land cover

- Introduction to topic (NSA {GIS})
- Land cover and land use training module (UNSD)
- Group work
- Discussions

09:45-10:30 4.2 Ecosystems and Biodiversity

- Biodiversity statistics and MEAs in Namibia (MET)
- Introduction to Environmental Information System and State of Community Conservation in Namibia (NASCO) (Namibia Nature Foundation)
- Introduction to Census of leopards and wildlife statistics in Namibia (Namibia Professional Hunting Association)
- Ecosystems and biodiversity training module (UNSD)
- Discussion

10:30-11:00 Coffee break

Session 5: Technical training on Environmental Resources (FDES Component 2) and Residuals (FDES Component 3)

11:00-12:45 5.1 Water statistics, including wastewater (FDES Component 2, SDG 6)

- Introduction to topic (MAWF)
- Introduction to Integrated Platform for Hunger Analytics (Early Warning System, UN-WFP)
- Water statistics training module (UNSD)
- Group work
- Discussion

12:45-13:45 Lunch

13:45-14:45 5.2 Forest statistics (FDES Component 2, SDG 15)

- Introduction to topic (MAWF (NAFOLA/Forestry)
- Forest statistics training module (UNSD)
- Discussions

14:45-15:00 Coffee break

15:00:15-16:30 5.3 Waste statistics (FDES Component 3)

- Introduction to topic (City of Windhoek)
- Waste statistics training module (UNSD)
- Discussion

Thursday 5 December 2019

08:30-09:30 **Session 6: Climate change and disasters statistics**

- Climate change statistics and the FDES (UNSD)
- Statistics on disasters (FDES Component 4) (Office of Prime Minister)
- Discussions

09:30-11:15 **Session 7: Technical training on climate change indicators (cross-cutting FDES theme, SDG 13):**

- Introduction to exercise (UNSD)
- Group work testing global set preliminary indicators
- Discussions

11:15-11:30 Coffee break

11:30-12:30 **Session 8: Way forward**

- Review and adoption of workshop recommendations
- Discussion on further work on national compendium and NAP

13:00-14:00 Lunch

14:00-15:30 **Session 8, Way forward cont.**

Evaluation
Closing remarks