



Final Report:

Regional Workshop on the Changing Role of Official Statistics in the State of Qatar: Why Data Culture Matters

September 21 - 22, 2022





Foreword



Dr. Saleh bin Mohammed Al Nabit
President of the Planning and
Statistics Authority

I am delighted to share with dear readers the final report of the Regional Workshop on “The Changing Role of Official Statistics in the State of Qatar: Why Data Culture Matters,” which was held in Doha on 21-22 September 2022. The workshop shed light on the multiple aspects of official statistics in Qatar, and the recent developments in the field of data responsibility resulting from the heavy use of electronic devices.

The official statistics produced by the Planning and Statistics Authority (PSA) are the official and reliable source of statistical data that the government, the private sector, research centers, universities, and civil society organizations depend on to make informed, evidence-based decisions. Such data is collected from many and varied sources, such as household and business surveys, and demographic and economic censuses, as well as another set of administrative records. This constitutes the main source of database/data warehouse that PSA is working to build in order to provide statistical tables, charts and graphics and to provide them to users; and to produce quantitative indicators related to the policies of the economic and environmental structure of Qatari society, and social protection, chiefly the indicators of the 2030 Agenda for Sustainable Development.

In this vein, the official statistics provide an accurate picture of the progress made by the state in implementing



development strategies and policies, foremost of which is the Third National Development Strategy (2023-2027), which PSA is working on. The data contributes to making decisions and monitoring their progress, while maintaining personal data confidentiality, protecting privacy, and building partnerships with data providers, whether they are individuals or business institutions and others, in light of its commitment to the Fundamental Principles of Official Statistics adopted by the United Nations Statistical Commission.

The ever-increasing demand for detailed and disaggregated data and statistics by national and international users has created new challenges for data producers in light of the digital technological advances, which have led to the generation of large amounts of data that can be used and employed in making sound decisions, and in preparing studies on the market and investment.

In light of such developments, a new data system has emerged which is able to fill the gaps in official data if it is well-managed and soberly used, especially with regard to national development strategies and the 2030 Agenda for Sustainable Development. This prompted the United Nations Statistical Commission at its 53rd Session to examine this system, and to ask the official statistical agencies to expand their responsibility to assume responsibility of supervising national data, considering a new and advanced governance. Data is considered the “New Energy” that drives the national development process, especially in building a strategic vision and a new role in data management.

Therefore, PSA has organized this regional workshop in response to the rapid developments, to shed light on the issue of data and its responsibility considering the digital transformation witnessed by the Qatar’s economy.

In conclusion, the aforementioned workshop, by all accounts, was distinguished because of its valuable presentations that constituted a translation of the emerging developments in the world of data and its management. Moreover, it witnessed a remarkable presence of about 150 participants from various ministries and government agencies; and an effective partnership with the Qatar Computing Research Institute (QCRI) of HBK University, Qatar Charity and ESCWA; as well as contributions from many UN, Arab and Islamic organizations. Further, many Arab countries, including Jordan, Palestine, Sudan, and Saudi Arabia, participated in this workshop.

The workshop came out with many important recommendations, which are now available on PSA’s website, the most important of which is “inviting PSA to develop and supervise a national strategy for data, while activating appropriate governance for it.”

Acknowledgements

The implementation of the regional workshop in the State of Qatar was made possible because of the encouragement and contributions of so many/. Initially, special thanks goes to HE Dr. Saleh bin Mohammad Al Nabit, President of Planning and Statistics Authority (PSA) and Mr. Mohammed Abdulaziz Mohammed Al-Nuaimi, Assistant to the President for imparting their vision, guidance, support, and valuable contribution to this workshop. Also, special thank goes to Mr. Stefan Schweinfest, Director of UN Statistics Division for addressing the audience and making it a grand success.

We are truly thankful for the close collaborations with our co-organizers: Qatar Computing Research Institute (QCRI) including Dr. Muhammad Imran; the partnership with the Economic and Environment Statistics at the Economic and Social Commission of Western Asia (ESCWA) including Dr. Wafa Aboul Hosn and the partnership with Qatar Charity including Mr. Mohamed Ali Al-Ghamdi and Mr. Abd Rabbi Ben Sahra.

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The success of this regional workshop wouldn't have become possible without the extended support, numerous contributions, and assistance from the PSA departments: the Public Relations Department, Communication Department, International Relations Department, Information Technology Department, Department of Financial and Administrative Affairs, and all PSA technical departments.

Furthermore, we would like to thank all the attendees and participants from various Ministers, Institutions, Universities, Research Centers, and Non-Governmental Organizations (NGOs).

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Disclaimer:

The views and opinions expressed in the regional workshop do not necessarily reflect the views of PSA.

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Introduction

The large-scale digitalization of various aspects of the social, economic and individual behaviors within and across countries resulted in a radical change in the nature and volumes of data on socio-economic developments. Its application is changing, with demand going beyond the traditional scope. Data is generated essentially everywhere, by use of mobile devices, GPS and other sensors, household appliances, spacecraft, and social networks. Its composition is becoming more varied, and it is constantly updated. These data sources can be very useful for policy purposes of developing the 3rd Qatar National Development Strategy and mainstreaming the SDGs.

The range of data sources is also expanding, along with the generated data types including common quantitative and qualitative characteristics of various objects, processes, or phenomena, and textual, audio-visual, and other “technological”

formats. New data can supplement or improve the results of previous observations, or even radically change them.

Due to the growth rate and increasing complexity of global processes, the role of official statistics has profoundly changed. The report of the fifty-third session of the United Nations Statistical Commission, Welcomed the report of the Working Group on Data Stewardship, appreciated the work accomplished. The report recommended “the development of a framework outlining the definition and application of the data stewardship concept, the advantages of assigning the role of data steward to the national statistical office.”



Abbreviations and Acronyms

ADaMM	Administrative Data Maturity Model	NDS-3	3rd National Development Strategy
AI	Artificial intelligence	NGOs	Non-Governmental Organizations
AITRS	Arab Institute for Training and Research in Statistics	NHRC	National Human Rights Committee
ANN	Artificial Neural Networks	NLP	Natural Language Processing
API	Application Programming Interface	NSDS	National Strategies for the Development of Statistics
CRS	Creditor Reporting System	NSO	National Statistical Offices
DIFI	Doha International Family Institute	NSO	National Statistical Systems
DOSM	Department of Statistics Malaysia	OIC	Organization of Islamic Cooperation
EO	Earth Observations	PCBS	Palestinian Central Bureau of Statistics
ESCWA	United Nations Economic and Social Commission for Western Asia	PSA	Planning and Statistics Authority in the State of Qatar
GASTAT	General Authority for Statistics in Saudi Arabia	QCRI	Qatar Computing Research Institute
GCC-STAT	The Statistical Centre for the Cooperation Council for the Arab Countries of the Gulf	QDG	Qatar Digital Government
GIS	Geographic Information System	SDG	Sustainable Development Goals
GPS	Global Positioning System	SDP	Sustainable Digitalisation Project
HBKU	Hamad Bin Khalifa University	SESRIC	Statistical, Economic and Social Research and Training Centre for Islamic Countries
HIS	Health Information System	TAGES	The Technical Advisory Group for Economic Statistics
ICD	International Classification of Diseases	ToR	Terms of Reference
ILO	International Labour Organization	UDHR	Universal Declaration of Human Rights
IsDB	Islamic Development Bank	UNDP	United Nations Development Programme
ITU	International Telecommunication Union	UNICEF	United Nations International Children's Emergency Fund
LFS	Labor Force Surveys	UN-OCHA	United Nations Office for the Coordination of Humanitarian Affairs
MICS	Multiple Indicator Cluster Surveys	UNSD	United Nations Statistics Division
ML	Machine Learning	WHO	World Health Organization
MOCIT	Ministry of Communication and Information Technology		
MOPH	Ministry of Public Health		



Expanding the Role of Official Statistics

The COVID 19 pandemic has highlighted a growing recognition among the decision-makers in Qatar of how important reliable detailed information is to understand many of the issues facing the national development strategies. There is an urgent need for a resilient and effective data ecosystem, as pressing problems and critical events are often unexpected. New and mutually beneficial partnerships are required to facilitate connecting data from different institutions. The expanding role of official statistics should consider, adapting governance and data stewardship to a digital society.

The Current, Statistical Act must reflect the needs of a modern digital national statistical system and address data gaps by broadening and deepening relationships with various ministries, institutions, universities, private sector, and the non-governmental organizations (NGOs). The Planning and Statistics Authority

(PSA) will initiate discussions with national partners on how they could be involved in the elaboration of national data strategy and encourage them to review their data quality, especially for administrative sources. The scope of PSA is widening, as new data sources become available, and society's expectations are changing regarding what new information data and statistics can have provided. The framework for official statistics should be enlarged to include the new role of PSA.

Innovation fueled by data can certainly be one of the major pillars where additional competitive advantages can be made, this is exactly the reason we need a data strategy in place. Taking into consideration the development of a data warehouse to disseminate accessible data to analyze, predict and improve clarity, and coherence of communication for a better decision making.

Objective of the workshop:

1. Shed light on addressing a solid data ecosystem to accelerate the emerging data and information needs to create prosperity and well-being for the society.
2. Put emphasis on the role of PSA in adapting governance, data stewardship, and data strategy
3. Deepening a good Data-Driven Culture for decisions, in support of the third National Development Strategy, realizing the importance of national partnership in the production, dissemination and use of statistics and data for evidence-based policy.

Expected outcomes:

After the workshop, the participants are expected to:

- Share knowledge and best practices on the changing role of official statistics in the State of Qatar and its implications.
- Exchange of information, practices and techniques to support the new changing role of official statistics in the state of Qatar and its implications on the 3rd National Development Strategy
- Acquire Clear vision on the importance of data governance, data stewardship and data strategy for PSA and to the entire Data ecosystem in the state of Qatar.

Partners:

This hybrid workshop was in partnership with national, regional, UN agencies, international organizations, and the non-governmental organizations (NGOs). Several national, regional, and international experts was invited to participate in the workshop, in Doha-Qatar during 21-22 Sep. 2022. The official language of the workshop was Arabic, with simultaneous interpretation to and from English will be provided throughout the workshop sessions. The workshop was also broadcasted via the PSA social media platforms (YouTube and Instagram).

For additional information and to access all workshop related materials [Click Here](#).

Co-organizer



Keynote speakers





Opening Statements

At the outset of his opening statement, HE Dr. Saleh bin Mohammed Al Nabit, President of the Planning and Statistics Authority, emphasized the importance of the objectives and outputs that PSA seeks to achieve through this workshop, which comes in light of the State's need to make fundamental changes and modernization in its official statistics in order to collect and disseminate timely, coordinated, reliable and accessible high-quality data and indicators.

His Excellency stressed that this event came in response to the calls of the recommendations of the United Nations Statistical Commission at its 53rd session, and in response to the accelerating developments surrounding the data revolution we currently witness, and the implications of the COVID-19 pandemic on the statistical process. Toward highlighting and updating the national data system to meet the daily needs of emerging data and information also emphasizing the essential role of the Planning and Statistics Authority in governance management and statistical process supervision, instilling the culture of the use of data produced by all institutions in various sectors. Thus, would contribute to sound decisions related to key development issues, in support of the preparation of the Third National Development Strategy, currently under way. The workshop comes further to emphasize the importance of national partnership in the production, dissemination and use of statistics and data in evidence-based policies.

Dr. Al-Nabit explained that the workshop comes in line with the unprecedented data flow, generated using AI-based technologies

such as mobile phones, handheld devices, smart apps, and social media that simultaneously become an integral part of the modern information environment, which has in turn made us, and the statistical community at all national, regional, and international levels, face great challenges, such as the lack of governance systems capable of dealing with, managing, purifying, storing, and providing a large amount of data to users to help them make sound decisions based on reliable evidence.

His Excellency pointed out that the COVID-19 pandemic emphasized the importance of data in planning global emergency crises management to allocate resources efficiently. This has prompted the NSOs to harness their capabilities on the implementation of innovative technological practices in response to the requirements of the new phase imposed by the pandemic, mainly the establishment of partnerships that allow the provision of open-source data on development issues and its integration with other relevant sources in real time. Hence, we hereby stress the role played by the Planning and Statistics Authority in this aspect, with a view to accelerating the transformation of the official statistical system to be one of the national development drivers and an effective tool in measuring progress towards achieving such development, considering the goals of the 2030



Agenda for Sustainable Development.

Finally, Dr. Al Nabit expressed hope that the outputs of this workshop will contribute to building a comprehensive central database that provides high-quality data for researchers, scholars and those interested in economic, social, and environmental development, and its geographical and spatial components.

Mr. Stefan Schweinfest, Director of the United Nations Statistics Division, stated that the workshop is indeed very timely to consider these issues since we are living through difficult and challenging times with the combined effects of the COVID-19 pandemic, the climate crisis and the war in Ukraine and conflicts elsewhere represent enormous challenges to global progress made over past decades. The demands for high quality information to make informed policy decisions seems to be ever increasing – on all levels: national, subregional, regional and global. Users need more data, better data, more timely data and more granular data. This is why we have to innovate, use new data sources and work in effective partnership with other data producers, such as big data and geospatial information. This implies a changing role for national statistical offices.

Mr. Schweinfest emphasized on the concept of Data Stewardship as it now being widely discussed, including at the United Nations Statistical Commission. National Statistical Office are no longer only the producer of trusted official classical national statistics such as population data and national accounts. They also have to play a leading role for a better coordinated and integrated national statistical and information system. Such a new system brings

together data from a variety of government sources and beyond and processes them through standard quality assurance procedures to make them available to data users for informed decision making. The notion of quality is thereby critically important, to maintain the trust of data users. Experienced national official statisticians are well versed in matters of quality assurance. So, they need to engage actively in a dialogue with users, to ensure that the information produced and disseminated is relevant, fit for purpose, a result of rigorous scientific production methods and compliant with international standards. The Fundamental Principles of Official Statistics, which were adopted by the United Nations General Assembly are our universal guide here.

Mr. Schweinfest accentuated that to lessen the burden of individual national statistical offices is to work together across borders and share experiences, in professional solidarity with the global statistical community. This workshop is a wonderful opportunity to do exactly this. I am a big believer in sub-regional and regional cooperation, as it brings countries with the same language and similar historical experiences and socio-economic characteristics together.

Work Session:

Day 1. Wednesday, September 21, 2022





Introductory Session:

Speaker: Dr. Ahmad Hussein | Statistics Expert at the Planning and Statistics Authority

Dr. Ahmad Hussein is the official statistics expert at Qatar's Planning and Statistics Authority. He currently heads the Modernization of Official Statistics Project in support of the 2030 Agenda for Sustainable Development, with a view to improving the effectiveness and efficiency of the statistical system in collaboration with the United Nations and developed European countries. He is the lead author of the National Strategy for the Development of Statistics 2008-2011 prepared during his work with former Qatar Statistics Authority.

During his tenure as Director of the Statistical Division of ESCWA, he formulated and supervised the implementation of its strategic frameworks for official statistics. He carried out several statistical projects funded by UNDP, ACFUND, ILO, IDRC and DFID. He has over 35 years of experience in many countries, especially in the Arab region, and holds a Ph.D. in Demography and Statistics from the University of Warsaw. He organized and participated in many international and regional conferences, meetings and workshops. Also, he participated in the development of several manuals and guidelines in official statistics at the regional and international levels, published a number of papers and provided advisory services to many Arab countries in various fields of official statistics. In addition, Dr. Hussein is a member of several international statistical societies and an elected member of the International Statistical Institute (ISI).

Summary of the presentation

At the outset of his presentation, Dr. Hussein highlighted that the large flow of and increasing demand for data by decision makers is growing day by day on all aspects of economic, social, and environmental life is generated through our use of portable devices, social media, remote sensing, GPS, the Internet of Things and other technologies. Hence, there is a need to use unconventional data sources, which requires us to use innovation, AI, and machine learning, and to manage data creatively and timely. Dr. Hussein stated that the Planning and Statistics Authority affirm and adhere to the UN Basic Principles of Official Statistics to fulfill our commitment towards data users, facilitate their work and enable them to make timely and proper decisions, especially after the spread of the COVID-19 pandemic. To fulfill our commitment to data users, we look forward to the new and expanded role of the Planning and Statistics Authority, which is the responsibility of data stewardship, managing, purifying, and expanding the scope of official statistics, and making them available to users in a timely manner. This is while creating the necessary legal environment, building partnerships, updating methodologies, improving the quality of statistics, and disseminating them through smart databases that provide decision and policy makers with their needs of the necessary products. In terms of data culture, the PSA endeavors to raise awareness of the importance of data, explain its use in many fields, especially in the field of forecasting, and prepare graphic, visual graphs and related reports.



Session One:

Panel Discussion (Data for Development Impact: Why We Need to Invest in Data)

Moderator: H.E. Mr. Mohammed Abdul Aziz Al Naimi | Assistant of the PSA President

The session was a panel discussion with high-level local figures to talk why we need to invest in data, Mr. Al Naimi stressed the current importance of data, especially in the field of sustainable development, so it can be agreed that “data is the new oil” of the modern world.

Mr. Al Naimi started the session by introducing the speakers:

1. Ms. Mashael Ali Al Hammadi, Assistant Undersecretary for Government Information Technology Affairs at the Ministry of Communications and Information Technology
2. Dr. Muhammed bin Saif Al-Kuwari, Vice-Chairman of the National Human Rights Committee
3. Mr. Mohammed Al-Ghamdi, Assistant CEO of the Governance and Institutional Development Sector and Director of External Affairs Office at Qatar Charity.
4. Mr. Khalid Al-Naama, Family Policy Director at the Doha International Family Institute

First: Ms. Mashael Ali Al Hammadi

Q1: Can you give us an idea of the importance of data for your Ministry in preparing sectoral strategies?

Q2: What is the most important data that you produce?

Q3: Are there challenges that you face in data collection and use in the field of digital transformation? Do you have specific suggestions in this area?

The answer to the questions was as follows:

In her answer, Ms. Mashael explained that the government of Qatar is working on collecting and providing data through Qatar Digital Government (QDG) portal. This strategy aims at collecting data, surveying customers, providing and exchanging government data and electronic services, and enhancing transparency in the presentation of data in a way that supports decision makers. She noted that the Ministry of Communications and Information Technology (MCIT) does not produce data, but rather collects and presents it in a sectoral data platform open to the world, such as the data of births and deaths, etc. She pointed out that the challenges are represented in the different models used and the reservation of some agencies to provide data in their possession. MCIT will work on preparing an integrated general strategy for data to be a beacon for data in Qatar. In summary, she said that data exists and all what we need is to facilitate access to it, which requires increasing investment in data, spreading awareness of its importance



and spreading a culture of data. She emphasized that MCIT has a technical role, but rather PSA's role is to analyze, disseminate and ensure quality of information.

Speaker's recommendation for PSA is that it is necessary to work on creating a data bank that incorporates integrated data about Qatar.

Second: Dr. Muhammed bin Saif Al-Kuwari

Q1: To what extent are human rights indicators and statistics used in the implementation and application of national and international human rights standards?

Q2: Do you face challenges in terms of availability and use of human rights indicators and the indicators of the 2030 Agenda for Sustainable Development?

Q3: Do you have specific suggestions regarding this matter? Do you propose to invest more in the collection and dissemination of data and indicators?

In response to the questions, Dr. Al-Kuwari focused on the following: Dr. Al-Kuwari stressed the importance of data in measuring performance through the use of indicators, explaining that the National Human Rights Committee (NHRC) benefits the most from data in its dealings with the International Human Rights

Committee. He also stressed that the 15 SDGs adopted by the United Nations in 2015 are, in fact, the core of human rights contained in the Universal Declaration of Human Rights (UDHR) in 2015 and subsequent international covenants, even as if they were written by human rights experts themselves.

Furthermore, he stressed that some parties suffer from what he called "data phobia" and called for building a data culture. He indicated that the challenge of obtaining data harms scientific research more than it harms the process of making the right decisions at the right time.

The speaker recommended the creation of a government application in which data and information can be downloaded electronically without the need to request it in writing, as the intended purpose might be missed.

Third: Mr. Mohammed Al-Ghamdi

Q1: Could you tell us about the role of Qatar Charity in supporting the achievement of the 2030 Agenda on Sustainable Development?

Q2: Do you document the development aid and relief that you provide at the global level according to certain classifications?

Dr. Al-Ghamdi replies to both questions were as follows:

Mr. Al-Ghamdi indicated that Qatar Charity (QC), as a non-governmental organization, directs 85% of its resources to serve sustainable development and has about 2,000 partners inside and outside Qatar. The speaker saw that data has become the language of the era because it gives clear indications for making the right decision. QC has made this rule one of the basics of its work at the local and international levels, as it works in 70 countries across the world. When QC faced various accusations, the United Nations was its leading defender and champion, because the society owns documented data in all its work and extensively uses technology and does not have any sensitivity in revealing data and information. He stressed that QC does not play the role of governments, but rather supports development efforts.

In terms of challenges, the speaker stated that access to some information is difficult and faces societal sensitivity, including the identification of some social groups such as orphans or the two phenomena of marriage and divorce and the number of people living below the poverty line. Additionally, the speaker indicated that the second challenge lies in maintaining the integrity of information and data, especially in line with the social media revolution, which transmits a huge amount of data without checking its credibility. The speaker recommended the need to build partnerships to provide information and emphasize the importance of data quality.

Fourth: Mr. Khalid Al-Naama

Q1: Could you tell us about how decisions are made based on the library and survey (field) research that your institute is conducting and activating its outputs? What are the policies used to disseminate the results of these research? Do you face challenges related to the use of the results?

Q2: Are you looking forward to participating in the preparation of NDS-3? How? Are you looking forward to a partnership with PSA in the field of family-related research?

Al-Naama answer focused on the following points:

Mr. Al-Naama pointed out that Doha International Family Institute (DIFI) carries out much research in the areas of marriage, childbearing and divorce that are published in peer-reviewed and

reliable periodicals before they are submitted to decision makers. We also encourage researchers to publish their research and are working to define a unified standard for publication and to ensure the quality of research and the integrity of information. With regard to supporting NDS-3, DIFI has important indicators related to young children and the elderly, health and education, all of which are important to the strategy, and DIFI is ready to provide them to those involved in NDS-3. Also, DIFI has a partnership with PSA.

Summary of the discussion:

Data challenges:

1. There is a fear of change phobia, and inaccuracy in filling out questionnaires, which requires raising the level of awareness among those who fill out the forms.
2. The difficulty of the forms presented to collect data and the participants' reservation in filling out the forms.
3. Relative awareness of the usefulness of information, especially with the revolution of social media, and its spread with uncertainty about the truthfulness of the information, its interpretation or analysis, and its negative impact.
4. Weakness of data and information culture.

Key suggestions resulting from the panel discussion:

1. Strengthening partnerships between data owners and producers.
2. Spreading a culture of data and raising awareness of its importance.
3. Creating an application for data flow and use.
4. Investing intensively in technology to document and disseminate data.
5. Working on presenting and publishing peer-reviewed research in all vital fields to support decision makers.



Session

Two:

Data Usage in Measuring the Progress

Chair: Dr. Khalid Ali Al-Quradaghi | Director of Information Systems and Advisor to the President's Office

Prior to joining the PSA, Dr. Khalid was Director of Knowledge and Innovation Systems in the Research and Development Sector at Qatar Foundation. In 2008, he received his Ph.D. from the University of Manchester, UK. In 2013, he led a unique MIT project as a visiting researcher and project manager for the Science, Technology and Innovation Project. In 2016, he received “the Advanced Certificate for Executives in Management, Innovation, and Technology (ACE)” from MIT.

First: Mr. Leonardo Menchini | UNICEF

Leonardo Menchini holds a PhD in Development Economics from the University of Florence, Dr Menchini is the UNICEF Advisor on Monitoring Child Rights in the Middle East and North Africa, providing technical support to research and statistical work conducted by UNICEF in the 20 countries of the region. Before joining the UNICEF regional office, he has been a chief technical advisor at the ILO Decent Work Team for North Africa (2018-2019), and chief of the at social policy/social inclusion sections at UNICEF Morocco (2016-2018) and UNICEF Egypt (2011-2016).

Presentation title: Strengthening Official Statistics and Administrative Data to Measure Progress among Children - Related SDG Indicators and Inform Policies for Children.

Summary of the presentation

The presentation initially focused on the importance of strengthening official statistics and administrative data to measure progress among children - related SDG indicators and inform policies for children. As the United Nations agency mandated to support for the realization of children's rights worldwide, UNICEF invests in the production and dissemination of solid and reliable data and evidence to inform policies and programmes for children,

including by strengthening official statistics and administrative data to measure progress in child-related SDGs.

In his presentation, Dr. Leonardo Menchini, the UNICEF Advisor on Monitoring Child Rights in the Middle East and North Africa, presented the status of child-related SDG data availability in the MENA region.

He highlighted that 40% of the 37 child-related SDG indicators in MENA countries have no data or insufficient trend data, stressing that part of available estimations is modelling results. He also highlighted the importance of household surveys which generates data for 80 SDG indicators (around one-third of the total), with the Multiple Indicator Cluster Surveys (MICS) alone able to generate estimates for the 33 SDG indicators.

The speaker spoke about the rapidly evolving statistics ecosystem, including big data, the need for real-time data, needs for lower administrative levels' estimates, a balance view of data ecosystem with a diverse set of complementary data sources needed to capture the key elements of SDG monitoring.

The core of the presentation was about the unused potential of administrative data in MENA to produce timely (and real-time) data on children, including for SDG monitoring. The speaker described the administrative

data as the backbone of national data systems that complement the data collection by household surveys. He described the administrative data maturity model (ADaMM), a tool developed by UNICEF to assess the national administrative data landscape, identify the priority investments to strengthen it, and promote a coordinated approach to admin data across sectors.

Dr Menchini concluded his presentation with recommendations to invest in the unexplored potential of administrative data and sector management information systems, and to capitalize on the lessons learned from the pandemic of COVID 19 in terms of investing in strengthening the national statistics systems to be ready for producing timely and real-time data in times of rapid socio-economic change and when facing external shocks, like the COVID pandemic.

Second: Dr. Henry Victor | WHO

Dr. Henry Doctor is a demographer and public health researcher. He serves as a Coordinator of Information Systems for Health in the Department of Science, Information and Dissemination in the World Health Organization (WHO) Regional Office for the Eastern Mediterranean in Cairo, Egypt. He graduated from the University of Pennsylvania and held technical, academic, and research appointments with the United Nations Office on Drugs and Crime (UNODC), Columbia University, Swiss Tropical and Public Health Institute, University of the Western Cape, Statistics South Africa, and the University of Malawi.

Presentation title: Improving Measurement and Delivering Impact Through Enhanced National Health Information Systems

Summary of the presentation

The presentation initially aimed to address the need in improving measurement and delivering impact through enhanced national health information systems. In his presentation, he highlighted the role of national health information systems in generating timely and reliable data to guarantee good healthcare decisions. He analyzed key challenges and opportunities to address existing data gaps in Eastern Mediterranean Region of the World Health Organization (WHO's). He presented a summary of key initiatives, tools and standards to support countries improve national health information systems and he emphasized on the role of national institutions and development partners in supporting WHO's five data principles that govern its work with member states: data as a public good; upholding Member States' trust in data; strengthening country data and health information systems; being a responsible data steward; and addressing public health data gaps.

The speaker projected the availability of data for each SDG3

indicator in 22 countries including the GCC countries. According to his analysis of data availability of 33 indicators of SDG3, Qatar has 20 indicators with at least two data points, 9 with one data point, 3 with no data and 1 indicator is N/A.

He outlined the opportunities to improve the HIS by Increasing digitalization, developing Global strategy on digital health 2020 -2025, digitalization of the International Classification of Diseases (ICD)11, Increasing mobile network coverage, Increased demand for data for action and cause of death data of COVID 19 pandemic.

He projected the WHO toolkit for routine HIS data and some available tools and approaches to build capacity in collection, processing, analysis, and use of data.

The speaker concluded his presentation with pointing out the key challenges and gaps as well as the way forward. The main challenges and gaps include limited availability of trained human resources, financial constraints, limited electronic infrastructure, lack of HIS action plans and data standards, quality of data, data use and review for action.

He concluded his presentation with how to Strengthen data systems to monitor health related SDG targets by proposing the collection of cause specific mortality data, health determinants, risks and morbidity, universal health coverage, build sustainable capacity for implementing key interventions, SCORE for Health Data Technical Package, Population based surveys, health systems and operational research, multisectoral approaches, improve statistical capacity, promote data sharing, increase availability and quality of (disaggregated) data.

Third: Dr. Vito Intini | UNDP

Vito Intini is the Regional Lead Economist and Inclusive Growth and Sustainable Finance Team Leader at UNDP in the Arab region. Dr. Vito specialized in International Economics, holds various master's degrees in environmental Policies, Development, and Labor Economics, and specialized in Regional Economics and Economic Geography during his Ph.D. studies and in Econometrics at postgraduate level.

Presentation title: The Usage of Alternative Data Sources for Rapid Socio-Economic Analyses: Lessons Learned from COVID-19

Summary of the presentation

In his presentation into the use of alternative data sources for rapid Socioeconomic analyses, Mr. Vito Intini pointed out the importance of Lessons Learned from COVID-19,

quantifying the economic cost after extreme shocks as it is important for pre-disaster planning and post-disaster assessment and surveys as a source of data to quantify the damages that are inflicted on people and businesses by disasters. He also pointed out the drawbacks of conducting surveys which include the high cost, implementation time and providing snapshots in specific points in time. However, he indicated that recently, satellite imagery, large-scale human mobility data (e.g., mobile phone GPS), and social media have been used to observe and analyze disasters and other shocks.

The speaker explained the importance of the remote sensing tool of Night Light Analysis which detects the artificial lights, calculates how long they turned off and analyses their trends in the days follows the event. This helps UNDP to uncover information about areas where power system has been affected and the obtained data is used as proxy to estimate economic consequences. Also, the Night Light Development Index is computed to provide localized income distribution which is used as a benchmark data to understand the affected population and other analysis.

He mentioned other applications of the satellite imaginary which include macroeconomic impact on GDP and building damage detection, including buildings that are potentially damaged, severely damaged, and destroyed.

The speaker also projected methodologies for analysis, including the causal inference procedure after a disaster, studies using surveys have identified various factors that affect disasters impacts through econometric models (e.g., logistic regression) and the difference in differences (DiD) method, a statistical method that compares the average change over time between “treatment” and “control” groups.

He explained that the Machine Learning method is a crossroad of the previous methods, and it can be used in all of them to offer more advanced analysis. He added that Machine Learning method is used by UNDP to scan the effect of previous crises and estimate the impact of new ones on households.

The speaker highlighted the role of UNDP in training Institutes/ Bureaus of Statistics around the world, where over the last two years key figures graduates included 180 SEIA, 171 HBDS and more than one thousand community members.

In his presentation, the speaker projected the need for real-time data in a crisis situation. For that purpose, UNDP uses some tools and approaches such as the SURGE Data Hub to conduct assessments offering tools for decision making at global level, with particular focus on crisis response, and UNDP’s data futures

platform, an open resource that translates multidimensional data into actionable insights to support Governments and other development practitioners. Other available tools include dashboards for vaccine equity, trackers for gender equality and simulators for temporary basic income, fossil fuel subsidies and data aggregation GEO Hub.

The speaker also explained the importance of multidimensional data to identify those who left behind and make sure that no one left behind.

Fourth: Mr. Yves Perardel | ILO

Mr. Yves Perardel is a Senior Statistician in the Data Production and Analysis Unit (Department of Statistics) at the International Labour Organization in Geneva. Previously, he served as a Statistician in the ILO’s Employment Policy Department. He has been involved in the processing of Labour Force Survey microdata from more than 160 ILO Member States. He holds a bachelor’s degree in Statistics from the University Pierre Mendès France in Grenoble and a master’s degree in Econometrics from the same University.”

Presentation title: Producing high quality data for priority topics in the world of work

Summary of the presentation

Mr. Yves Perardel from International Labor Organization gave a presentation on producing high quality data for priority topics in the world of work. In his presentation, he pointed out that high quality data should be collected and disseminated in a timely manner, comparable across countries and cover all aspects of labour statistics (i.e., large number of indicators and large number of cross tabulations).

He also projected the need for and benefits of microdata as well as the process of collecting microdata which includes acquisition, processing, documentation and dissemination. Also, he presented the trend of labor force surveys (LFS) household surveys micro datasets over the last 10 years where he pointed out that in September of 2022 12761 LFS household microdata have been processed in 165 members of ILO. When it comes to Arab States, he stated that microdata was available from Iraq, Jordan, Lebanon, Saudi Arabia, State of Palestine, United Arab Emirates and Yemen.

He concluded his presentation with highlighting the need of receiving LFS microdata from the other ILO Member States to fill data gaps.

Day 2. Thursday, September 22, 2022



Session Three: Future of Economic Statistics (Stewardship, Networks, and Ecosystems)

Chair: Dr. Wafa Aboul Hosn | Chief of the Economic and Environment Statistics Section at ESCWA

The objective of this session was to highlight the multitude of challenges economic statistics faces arising from economic globalization, digitalization, technological changes, pandemics, climate change and sustainability. Serious national measures and policies to adapt to the changes are needed on the part of National Statistics Offices (NSO) to enhance capacity and ability to meet the rising demands for accurate and relevant quality statistics from business and public policy makers and data users.

First: Dr. Konrad Pesendorfer | General Authority for Statistics of the Kingdom of Saudi Arabia (GASTAT)

Dr. Konrad Pesendorfer is Chief Statistician of the General Authority for Statistics (GASTAT) of the Kingdom of Saudi Arabia. From 2020 to June 2022, he was President of the General Authority for Statistics (GASTAT), reforming the institute and preparing the hand-over to a local President of the authority. Dr. Pesendorfer studied economics at the Vienna University of Economics and Business Administration and holds a Ph.D. in economics. He was lecturer on international economics at the H.E.C. Business School in Paris and at the Institut d'Etudes Politiques de Paris (Sciences Po) in Paris.

Presentation title: Building Modern Data Ecosystem – Opportunities and Challenges

Summary of the presentation

The presentation focused on the experience of KSA particularly the lessons learned from KSA census experience. The presentation stressed the fact that data is a public good and as such it should be accessible and shared which are prerequisites for knowledge generation and innovation. National statistical offices will need to build a well-functioning modern data ecosystem with data stewardship to produce quality statistics. In sharing KSA experience Dr. Konrad highlighted how they in the Saudi Statistical Authority were able to implement the hybrid census using big data, administrative data and conventional field survey methods to obtain population data. The organization was also able to expedite the provision of statistical data for policy and decision makers in the Government and business. Dr. Pesendorfer then summed his presentation by stressing the following lessons:

- ◆ Data should be considered a public good, Access, Data sharing
- ◆ Functioning Data Ecosystems require sound and efficient Data Governance and Principles
- ◆ National Statistics Institutes are well fit to take the role of Data Stewards – but with limitations
- ◆ Cooperation and Partnership more important for a well-functioning Data Ecosystem than the institutional setup

Second: Dr. Saleh Al Kafri | Palestinian Central Bureau of Statistics

Dr. Saleh ALKAFRI obtained a PhD degree in economics from Pavia University in Italy, and a master's degree in economics from Birzeit University in Palestine. Since mid of 2008, he works as a Director General of Economic Statistics at the Palestinian Central Bureau of Statistics (PCBS).

Dr. ALKAFRI has many years of experience in Statistical consultation and data analyst in numerous institutions organizations and programs. Since 1992 he has worked as programmer, data analyst and trainer, lecturer for Gov's and NGO's such as the Palestinian studies center, the ministry of labor, the International Labor Organization, Belgium consulate in Ramallah, Muwatin and other institutions. In addition, on his teaching in the universities.

Presentation title: Developing Stewardship, Networks, and Ecosystems for The Economic Statistics in The Arab Region: Challenges and Opportunities

Summary of the presentation

Dr. ALKAFRI began his presentation by highlighting where the NSOs are in the Arab region, changes that took place in the nature of economic statistics and the challenges that arose as a result. He stressed the need to transition from the old radiational statistics production methods with high cost to new statistical production system with low cost. Dr. ALKAFRI highlighted the expected roles and responsibilities of the NSOs in the region. The modernization of systems will require focus on Integration and Standardization Methodology and Institutional environment. Referring to the High-Level Seminar in KSA 2020 and TAGES recommendation he mentioned the following institutional modernization and transformation requirement to support the system of new economic statistics:

- ◆ Unifying statistical tools and language
- ◆ Modernization of the statistical operations
- ◆ Developing IT infrastructure and legislation to guarantee data confidentiality
- ◆ developing incubator teams across countries,
- ◆ Strengthening partnerships and communication



- ◆ Enhancing staff capacity and establishing a network of experts

Dr. ALKAFRI highlighted data stewardship framework elements proposed by New Zealand and proposed the way forward Along TAGES procedure by forming a Local Expert Group for Economic data to lead the work. Qatar can be a leader by establishing a Local Expert Group for Economic data to lead the work,

The following steps are needed to kick off the process:

- ◆ Prepare ToR for a comprehensive project to develop the tools and the draft concept of Stewardship, Networks, and Ecosystems for the Economic Statistics in Qatar
- ◆ Doing first exercise of self-assessment and develop first template of data strategy and roadmap
- ◆ Sharing the whole project process and results with TAGES and other international agencies to be as first case in the region that can be follow
- ◆ Dr. ALKAFRI made a reference to the Palestinian experience and partnerships with ESCWA Expert Group in going forward.

Third: Mr. Ahmed Al-Awah | ESCWA

Mr. Al-Awah is the Chief Technology Officer (CTO) of the United Nations Economic and Social Commission for Western Asia (ESCWA) where he plans, directs, and oversees strategic ICT programs and operations of the organization, assesses opportunities, and risks of emerging technologies, and advises ESCWA clusters and offices on state-of-the-art and future looking information, communication, and data technologies of potential value to organization's core areas of work. Mr. Al-Awah also acts as the Business Transformation Lead for major system projects of significant importance to the institution which typically impact

critical programs and operations and oversees the organization's Digital Transformation Strategy.

Presentation title: Building Modern Data Ecosystem – Best Practices from the UN ESCWA Experience

Summary of the presentation

Mr. Al-Awa's presentation focused on the changing landscape of data production and data use. To build a new modern system, he posed several questions representing issues to be addressed. The issues most relevant included the vision, the data use cases, the analytics capacity, data governance and data infrastructure. In order to, determine the maturity level of the NSOs, he identified 5 stages of analytical maturity and emphasizes a focus on use case and a strategy that adds value for the stakeholders.

Mr. Al-Awa suggested the need for exploring modern data architectures to achieve a holistic and integrated approach to the use of the great volume of data required in by Governments today. A federated architecture can be used to enhance and support the mission and utility of data in Government operations and activities and lead to more successful adoption of big data technologies.

Mr. Al-Awa highlighted the high-level reference



architecture of the ESCWA data ecosystem and reflected on practical application of data driven policy making framework. At the conclusion of the presentation, Mr. Al Awa demonstrated the working of a live ESCWA Data portal for the Arab region. The portal offers a variety of statistical services and products covering a range of social and economics areas, with open access to statistical data, analysis, and information.

Fourth: Mr. Greg Peterson | Statistics Canada

Greg Peterson is the Assistant Chief Statistician responsible for the Economic Statistics Field at Statistics Canada. His responsibilities include ensuring the quality, relevance and accessibility of a large and complex statistical program. This covers all aspects of the Canadian economy, including industrial production, merchandise trade, investment, energy and environment-related information, consumer and producer prices, and the macroeconomic statistics produced within the Canadian System of National Accounts. Greg is an economist with a master's degree in economics from Queen's University. He began his career at Statistics Canada in 1990.

Presentation title: Canadian Experience in the Role of Networks of Economic Statistics in Data Stewardship

Summary of the presentation

Mr. Peterson began his presentation by highlighting how the nature of official statistics has changed. He compared the old and the new models of official statistics. In the old model National Statistical Offices were the main source of data on economic and social data with a monopoly type structure- they had a high cost of infrastructure and data acquisition. In the new model, the National Statistical Offices are considered as a trusted partners

to integrate data from various sources. The stewardship activities in the new model include (Conceptual standards and frameworks, frameworks for privacy and confidentiality and a trusted third partner and Integrator).

Mr. Peterson showcased the experience of Statistics Canada with the new statistical model using three cases from the Energy sector, Canadian Chamber of Commerce, and Quality of Life Framework. Statistics Canada coordinates the measurement of the framework which includes partners from sectors of society, business, and public entities. In the last part of the presentation, Mr. Peterson highlighted the role of the United Nations Network of Economic Statisticians. The network endeavors to support the evolving role of official economic statistics that transitions "Beyond GDP"

Mr. Peterson recommended the following approach going forward:

- ◆ Adoption of team approach
- ◆ Cooperation between National Statistical Offices and international organizations, academia, business, and civil society
 - breaking down barriers between economic, population and environment statistics
- ◆ A global perspective for development

Session Four: Precision in Sustainable Development with Artificial Intelligence

Chair: Dr Muhammad Imran | Senior Scientist at Qatar Computing Research Institute (QCRI)

Dr Muhammad Imran is a Senior Scientist and Lead of the Crisis Computing team at Qatar Computing Research Institute (QCRI). His interdisciplinary research focuses on natural language processing, social computing, and applied machine learning. He analyzes large amounts of social sensing data during time-critical situations using big data analysis techniques such as data mining, machine learning, and deep neural networks. He develops novel computational models, techniques, and technologies useful for stakeholders to gain situational awareness and actionable information during sudden-onset disasters. Dr. Imran received his PhD in computer science from the University of Trento in 2013 and then joined QCRI as a post-doctoral researcher. Dr Imran has published over 100 peer-reviewed research papers in top-tier international conferences and journals. Four of his papers received the Best Paper Award and two Best Paper Runner-ups.

First: Dr. Dohyung Kim | UNICEF

Dr Dohyung Kim is a Data Science Lead at UNICEF's Giga Initiative with more than a decade of experience working on geospatial analysis and remote sensing applications. He earned his PhD. From the University of Maryland in 2015 focusing on the use of remote sensing data for global scale Land Cover and Land Use Change analysis. After he finish his Ph.D., He worked at NASA Goddard Space Flight Center as a post-doctoral researcher and worked with international organizations such as the World Bank Group and UNEP until he joined the UNICEF Office of Innovation in 2017. His research interests are in applying geospatial data and Machine Learning algorithms in support of the achievement of sustainable development goals.

Presentation title: Scalable AI for School Mapping

Summary of the presentation

The presentation began by outlining the Giga initiative, which is a partnership between the UNICEF and ITU and aims to connect young people to the internet. Since being established in 2019, the Giga initiative has connected over 1.3m people to the internet, with over 3700 schools connected.

The Giga initiative has been developing a database of schools and identifying schools without internet connectivity. In one project in Sudan, one challenge faced was that school location data was often unavailable and the Giga initiative deployed AI and ML to identify schools in an efficient and scalable manner. Using high resolution satellite imagery from MAXAR/US State Department, image tiles of geographical areas of 600m x 600m were assessed using AI to identify building structures within the tile that appear to be school buildings, with school locations then identified. The model initially had an accuracy rate of approximately 80%, with errors often encountered with 'false positives' in incorrectly identifying

structures such as fences and industrial buildings as schools. The model has been refined using ML and accuracy has improved to around 90%. The next steps are to enhance scalability in applying the model to the entire country.

Similar models are being applied through the Giga initiative in other countries, particularly across Africa and South America. Different countries and regions have different terrain and types of school structures and require a customized approach in how AI is programmed to identify schools. Further advancements in the process are to further enhance scalability, automate data processing and to establish an API for model deployment.

Second: Dr. Wafa Aboul Hosn | UN ESCWA

Dr. Wafa Aboul Hosn, is the Chief of Section of Economic and Environment Statistics at the Economic and Social Commission of Western Asia (ESCWA), and detains a Ph.D. Applied Statistics and Environmental Sciences from McGill University, Canada, as well as a M. Sc.in Ecology from Université de Montréal, Canada. At ESCWA, Wafa is presently leading the work programme on economic and environment statistics, developing projects, providing technical assistance and capacity building to member countries in strengthening and modernizing their statistical systems, implementing international statistical standards, and monitoring the progress in the implementation of the 2030 agenda for sustainable development.

Presentation title: Remote Sensing for flood monitoring and disaster management in local communities in the Nile Basin and coastal areas in Egypt

Summary of the presentation

The presentation began by touching on the importance of disaster management as an obstacle to progress towards achieving the sustainable development goals. The Sendai Framework for Disaster Risk Reduction (DRR) was introduced, with focus on the reporting requirements and the need for both traditional and emerging data sources. Geospatial technologies, remote sensing Earth Observations (EO) and social media were highlighted as important new data sources which can be reported in a more timely, frequent

and disaggregated manner, particularly for remote areas.

The complimentary link of such new data sources to official statistics was then outlined, along with the need for partnership and cooperation between National Statistic Offices and National Mapping Agencies and DRR agencies. Case studies outlining the damage and challenges experienced in the 2015, 2016 and 2020 floods in the Nile Basin and coastal areas in Egypt were outlined. Current initiatives underway to reduce the loss of life and damage from future floods through earlier detection and damage assessment were pointed out, including the development of a flood estimation tool for localized floods and a guide for flood detection with EO and Google Earth Engine (GEE).

Third: Dr Aladdin Shamoug | UNDP

Dr Aladdin Shamoug is a Senior Digital Transformation Advisor. He works for the United Nations Development Programme (UNDP) in Ukraine. His experience extends over 15 years in which he assumed multiple roles and positions with the UN in Sudan, United Arab Emirates, Bosnia and Herzegovina, Kosovo, Afghanistan, Turkey, Syria, New Zealand, United States, Malaysia, and Ukraine.

He is an expert in developing and employing digital technologies in human development contexts. Dr Shamoug has a PhD in Information Science from the University of Otago in New Zealand. His research interests include AI, ML, NLP, and the Semantic Web.

Presentation title: Using ML/NLP in tracking progress towards SDGs

Summary of the presentation

The presentation began by introducing the technique of social listening, which involves capturing information from social media in the form of key words to determine the pulse of crowds and trends of discussion in the community. While the use of key words is relatively fast and efficient, the utilization of Natural Language Processing (NLP) and Artificial Neural Networks (ANN) makes the approach more useful. Vectors are used to represent difference sentences and assess which SDG is most relevant to them. The sentiment and similarity between the tweets is also assessed.

The presentation then referred to an example application in Ukraine where the pulse of the community can be assessed by filtering on a particular SDG, thematic area, time period or geographical area, and also pinpoint social media tweets based on whether they are positive or negative, or of a particular sentiment. Eight primary categories of emotion are used to categorize tweets, with 42 secondary categories. Future are to beyond mapping tweets to SDGs and map at the target and indicator level, as well as covering more regional areas, so that model predictions can inform policy makers on geographic or thematic areas where most improvement is required. Manual evaluation of results will also be used to further improve SDG classification accuracy and develop a labelled SDG text corpus. Use of images in addition to text will also be explored.

Fourth: Dr. Gonzalo Pizarro | UNDP

Dr. Gonzalo Pizarro is the Regional Adviser on SDG Integration in UNDP's Regional Hub for the Arab States. He has led the design and delivery of UNDP's integrated development offer on SDGs, development and application of system analysis and tools.

With over 20 years of professional experience in both the private sector and the United Nations System, he holds a Ph.D. in Water Resources Management from the Graduate School of Arts and Sciences of the University of Columbia in the City of New York. Dr. Pizarro joined the UN family in October 2005 as a policy advisor for water resources of the United Nations Millennium Project, an advisory body to the Secretary General. Since joining the United Nations System, Dr. Pizarro has focused on the integration of Global Objectives into national development planning processes and addressing sustainability issues.

Presentation title: Sustainable Development and AI

Summary of the presentation

The presentation commenced with a framing of the current state of progress towards the SDGs, with countries very high on human development, ranking lower in terms of ecological footprint, as an example. No country has fully achieved all SDGs and countries need to chart their own individual pathway to sustainable development. By following the SDP principles of 'universality', 'integration' and 'no one left behind', countries can ensure that they maximize synergy between the SDGs and reduce inequalities. Development can be accelerated by moving from monitoring average performances on SDG indexes at a national level, to monitoring performance of specific locations with more disaggregated data.

The second part of the presentation explored how AI can be used to accelerate sustainable development. While applications of AI can have both positive and negative effects on development, the evidence suggests that overall, the impact is considerably more positive. One positive example highlighted was the use of NLP to understand the extent of hate-speech in social media.

The third part of the presentation focused on using AI to monitor progress. Use of AI can lead to more insights on whether we are making development progress. As an example, the UNDP Data Futures Platform is a data depository with simulation capabilities that can support policy makers in understanding the consequences of different policy choices.

Session Five: Modernizing Statistical Ecosystem

Chair: Dr. Sharifa Noaman Al Emadi | Executive Director of Doha International Family Institute

Dr. Al Emadi holds PhD and master's degrees in Psychology and Counselling from Manchester Metropolitan University and was awarded the PhD Degree holders Platinum Medal at the Education Excellence Day in Qatar for the year 2009.

Dr. Al Emadi is a certified clinical psychologist by the Ministry of Public Health in Qatar. She currently functions as a licensed psychologist to treat behavioral disorders, specifically drug addictions. She is considered to be teaching family relations at Qatar University. Besides her role as the Executive Director of Doha International Family Institute, she is also a member of the National Committee for Women, Children, the Elderly and Persons with Disabilities, and a board member in the Social Sciences and Humanities Department at Qatar University.

First: Mr. Mohamed Ali Al-Ghamdi | Qatar Charity

Mr. Mohammed Ali Al-Ghamdi is currently Chief Governance Officer and acting Director External Affairs at Qatar Charity.

Mr. Mohammed Ali Al-Ghamdi obtained his bachelor's degree in Social Work from Qatar University in 2000 and held several positions in the Ministry of Awqaf and Islamic Affairs between 1991 and 2004 before being appointed as Director of the Minister's Office from 2004-2006. He was appointed Director General of Qatar Islamic Cultural Center / Al Fanar from 2006-2011.

Presentation title: Documentation of the Assistance Provided by The Organizations of Civil Society: Framework, Challenges, and Requirements: The Experience of Qatar Charity

Summary of the presentation

This presentation focused essentially on the Qatari civil society contribution to the international solidarity system through humanitarian and development assistance to many countries around the world. As the humanitarian situation is witnessing a deterioration, resulting from disasters and crises suffered by many countries, coupled with growing poverty hindering efforts to achieving national development goals resulting in accelerating increased needs for many countries. This calls for strengthening the statistical capacity of countries to identify, track, document and report on the much-needed aid and humanitarian response for the beneficiary countries. On the other hand, to enable evaluate the extent of efforts made in supporting various development sectors in accordance with the development goals set in their national strategies. The State of Qatar also needs these data and statistics to accurately report its contribution in supporting the international solidarity system in the form of humanitarian and development projects. Although there are reference work systems for documenting aid such as the Financial Tracking

Service (UNOCHA) for humanitarian aid and the OECD Creditor Reporting System (CRS) for aid in general, efforts to document aid provided by civil society organizations face several challenges and difficulties. Perhaps the most important of which are the diversity and difference of national statistical practices and systems, in addition to the high cost of data acquisition and management in accordance with the international best practices. The presentation highlights the experience of Qatar Charity, as a model, in its management of statistical data related to the development and humanitarian aid it provides to more than sixty countries annually.

Second: Dr. Atilla Karaman | SESRIC

Dr. Atilla KARAMAN is the Director of the Statistics and Information Department of the Statistical, Economic and Social Research and Training Centre for Islamic Countries (SESRIC), a subsidiary organ of the Organization of Islamic Cooperation (OIC). He received his BA in Banking and Finance in 2001, his MBA in Financial Management in 2004 and his PhD in Operations Research in 2015. He joined SESRIC in April 2007 after having worked in the management consultancy, financial audit, and economic research sectors in Turkey and Germany. The research interests of Dr. Karaman include strategic and managerial issues of official statistics, Sustainable Development Goals, statistical capacity development, and fuzzy multi-criteria decision making with missing information.

Presentation title: Efforts in Modernizing Statistical Legislations and Coordination within National Statistical Systems: A Regional Perspective

Summary of the presentation

This presentation focused on fundamental Principles of Official Statistics and two themes regarding "trust in institutions" and "rights of citizens to public information", which can be achieved by ensuring transparency of legislation, rules and measures pertaining to the operation of the statistical system together with

the official statistics to be produced not only by the National Statistical Offices (NSOs) but also the other public institutions constituting the National Statistical Systems (NSSs) in a coordinated manner. The COVID-19 pandemic with its many challenges to the NSS in adjusting their data governance to meet the data demands while compensating the data scarcity due to the limited field survey implementation proved once more that appropriate statistical laws and an efficient coordination within the NSS are needed for developing and implementing the responses for such crises. Accordingly, this presentation focuses on the efforts of Statistical, Economic and Social Research and Training Centre for Islamic Countries (SESRTC), a subsidiary organ of the Organization of Islamic Cooperation (OIC), on two significant strategic and managerial issues of official statistics, namely, modernizing statistical legislations and coordination within national statistical systems, which have the potential to influence (open) data culture in an official statistical setting.

Third: Dr. Salah Al Muzahmi | GCC-STAT

Dr. Salah Al Muzahmi is the Director of Research & Development Indicators department at the Statistical Centre for the Cooperation Council for the Arab Countries of the Gulf (GCC-Stat) since March 2017. He is also the acting director of the Population and Social statistics.

Dr. Salah received his Ph.D. in Public Health from the University of Queensland, Brisbane, Australia 2015, his doctoral thesis aimed to study the mortality patterns in Oman via in-depth review of epidemiological and demographic patterns.

Dr. Salah graduated from The Sultan Qaboos University, Oman, with his B.S. in Mathematics and Computing in 1992. In 2003, Dr Salah obtained his MPH in Applied Epidemiology from Curtin University of Technology, Perth, Australia.

Presentation title: Supporting the GCC Agenda with Statistical Evidence in the Evolving Data Ecosystem - Prospects and Challenges

Summary of the presentation

The presentation discusses the future prospects and the main challenges faced by the GCC Statistical System in supporting the GCC as it enters its fifth decade of existence with reliable and high-quality statistical data and evidence. There is a significant increase in demand, on the one hand, as well as a large amount of data available mostly from unofficial sources, on the other.

While this new reality presents a challenge, it also provides a great opportunity for the National and GCC Statistical Systems. As a result of such a new data ecosystem, harmonized, high value-added data and information can be produced and communicated, supporting decision-making and formulating sound policies, and monitoring the implementation of the GCC agenda on the ground, as well as evaluating impact and performance, while highlighting the GCC bloc as a leading regional and international player.

The presentation recommended strengthening the legislative and institutional structure of national data in a way that assures the role of national statistical offices in leading the transformation. Moreover, its role improves the effectiveness of collaboration and coordination among data producers and users in the national statistical system (g. policy makers, researchers, academia, civil society organizations, the general public, etc.). Ensure the availability of timely, reliable, quality and relevant statistical data for all users.

Fourth: Mr. Abu Camara | The Islamic Development Bank Institute (IsDBI)

Mr. Abu Camara obtained MSc in Statistics from the University of Aarhus, Denmark. He is currently the Lead Statistician in the Economic Research and Statistics Division of the Islamic Development Bank Institute. He leads a team of statisticians that are responsible for data and statistical activities of the Islamic Development Bank Group. He has more than 20 years of working in the field of statistics. Previously, he worked at the Gambia Bureau of Statistics as director responsible for the coordination, dissemination, and quality of statistics in the National Statistical System. He has led the design and implementation of surveys/ census in financial, economic, household demographic, labor force, agriculture, preparation of sampling frames, management and administration of field and office staff, questionnaire design; data collection; processing; tabulations; analysis and dissemination.

Presentation title: The Importance of Data in Guiding the Bank's Activities for its 57 Member Countries

Summary of the presentation

The presentation showcases the importance of evidence-based decision making. IsDB Group make use of data produced by national statistical authorities as well as data from recognized international sources to inform its decisions such as (1) targeting intervention to the most important projects in member countries (2) Understanding the portfolio performance in order to make informed decisions and facilitate



country level dialogue (3) Evaluating the impact of its intervention in member countries (4) Monitoring the progress in achieving SDGs (5) Providing training, support conferences/seminars and other activities for advocacy, dissemination, and knowledge building in collaboration with other regional and international organizations. Thus, the presentation will introduce the audience to IsDB Group, its unique Model of South-South Cooperation, its financing trend, and targeted interventions. It avails the audience the opportunity to know about the types and sources of data IsDB Group use in informing its decision making.

Data compiled, analyzed, and disseminated by organizations are oftentimes primary data produced by National Statistical Systems (NSS). These data as well as those from recognized international organizations help in making informed policy choices. It is therefore imperative to strengthen the capacity of national statistical offices and other data producers in the NSS to make available the required data to monitor and report on the progress of the national and international initiatives such as the Sustainable Development Goals. New data sources, methods and tools can help improve the timeliness, coverage, and quality of development data through collaboration and partnership and information sharing. The IsDB will continue to further its collaborations with relevant international organizations to facilitate the strengthening of the statistical capacity of member countries, especially in these times when evidence-based decision making is very critical.

Fifth: Dr. Hadi Al-Saidi | Arab Institute for Training and Research in Statistics (Amman)

Mr. Al-Saidi is an economic statistician and an expert in strategic planning and in statistical systems evaluation and modernization,

who has worked in several government institutions in Tunisia. Currently, he is the Director General of the Arab Institute for Training and Research in Statistics (AITRS) in Amman, Jordan, since 2019.

Presentation title: National Strategies for Developing Statistics and Their Role in Supporting the Ability of Statistical Agencies to Manage and Govern Data for Development

Summary of the presentation

The presentation discussed the importance of preparing National Strategies for the Development of Statistics (NSDSs) that are considered among the most important statistical coordination mechanisms inside and outside the National Statistical System (NSS), as they are prepared according to a participatory and interactive perspective among various stakeholders in the statistical process. Thus, they lead to the development of visions, missions and goals that translate the users' needs and explore their anticipations and expectations from the national statistical production system and its contribution to responding to their needs. Furthermore, the National Strategies for the Development of Statistics (NSDSs) guarantee the minimum provision of data and indicators for the preparation of development strategies, as they are among the most important components of the statistical strategy. Furthermore, the presentation will also attempt to provide



an overview on how to prepare national strategies and their close connection with the needs for statistical data to build evidence-based development strategies.

Sixth: Dr. S. Duygu Sever-Mehmetoglu & Dr. Damilola S. Olawuji | Hamad Bin Khalifa University

Dr. S. Duygu Sever-Mehmetoğlu is a Post-Doctoral Researcher at Hamad Bin Khalifa University, Doha. She holds a PhD in Political Science and International Relations from Koç University, İstanbul. She has formerly worked for IFRI (Institut Français des Relations Internationales), Center for Energy in Paris as a Visiting Researcher. She has also worked for EU Horizon 2020 Project: FEUTURE (The Future of EU-Turkey Relations: Mapping Dynamics and Testing Scenarios) for Energy and Climate Drivers.

Professor Damilola S. Olawuji, is a Professor and holder of the UNESCO Chair on Environmental Law and Sustainable Development at Hamad Bin Khalifa University, Doha, Qatar. He is also chancellor's fellow at the Institute for Oil, Gas, Energy, Environment and Sustainable Development (OGEES Institute), Afe Babalola University, Ado Ekiti, Nigeria. In 2022, he was appointed as an Independent Expert on the United Nations Working Group on Business and Human Rights. Prior to this, he served as an Independent Expert on the African Union's Working Group on extractive industries, environment, and human rights violations in Africa.

Presentation title: The Role of Data in Monitoring and Predicting the Impact of Climate Change

Summary of the presentation

The presentation addressed the issue of climate change which

requires clear, reliable, and transparent data on the levels of compliance with greenhouse gas (GHG) emission reduction and adaptation standards, and information on penalties assessed for non-compliance. Apart from their informational value for regulators and the general public, statistical data on emission reduction can serve the purpose of evaluating and monitoring the practical impact and effectiveness of climate law and policy. Such data can also enable other business enterprises, government agencies and ministries to design and implement their sustainability programs in an informed manner.

Despite the systemic importance of data in monitoring and predicting the impact of climate change, several practical challenges, especially lack of equitable access to data monitoring technologies, continue to hinder the availability of verifiable and reliable statistical data on climate change impacts and responses across the world. This presentation discusses the urgent need for addressing such barriers to data collection, verification, and monitoring. Most important is the need for international development agencies to address systemic barriers to the flow and absorption of remote sensing technologies that can enable statistical authorities across the MENA region to better detect, monitor, and measure the GHG emission practices of operators and to propose informed regulatory approaches that will holistically mitigate and address such venting practices. Statistical authorities also have key roles to play in increasing training and capacity development on the deployment of such climate technologies.

Session Six: Data Stewardship, Data Governance, and Data Strategies

Chair: Dr. Juliet Ibrahim | Ministry of Public Health Qatar

Dr. Juliet Ibrahim is currently the Director of eHealth in the Ministry of Public Health, Qatar, where she is working on developing national systems and integration platforms for connecting information across the health sector, including the establishment of a national health information exchange and central data repository. She has worked in Qatar's government health care system for over 15 years; leading and working in different areas related to planning, strategy, and policy at the ministry level, including leading the development of the National Health Strategy 2011-2016, and National Health Strategy 2018-2022.

First: Mr. Wan Mohd Shahrulnizam | Department of Statistics Malaysia (DOSM)

Wan Mohd Shahrulnizam Wan Mohd Najuri is a Senior Director of Population and Demographic Statistics Division at Department of Statistics, Malaysia (DOSM). He is responsible for the planning, preparation and implementation of the population and housing census and inter-censal survey; analyzing and producing population and housing statistics based on the census and survey data; producing geospatial information and maps using Geographical Information System (GIS); compiling vital statistics such as fertility, mortality, marriage and divorce based on birth, death, marriage and divorce registration records; and compiling current population estimates, population projection, life tables as well as other demographic indicators.

Presentation title: Data governance Vs. Data stewardship: What is the Role in Streamlining the National Statistical System? Malaysia's Experience

Summary of the presentation

Streamlining the data is the focus of presentation. Apart from maintaining the quality of data, involvement of local forces in data management process is much advocated. To establish effective and workable frameworks, involvement of local bodies supported by the guidelines of international data organizations is necessary. Granular level of research coupled with overarching data initiatives is to be deployed under the control and management of a supreme data council. Through streamlining the national statistical system by such a supreme council, sound statistical knowledge at all capacities with technological expertise can be fostered. For foster the data culture across the stakeholders and to address the gaps in

the system as mentioned in the following scenario

Scenario that necessitates to Execute Data Governance¹

- ♦ Absence of horizontal governance for strategic direction on data issues
- ♦ Lack of adequate digital infrastructure and a complex rules framework
- ♦ Challenge of acquiring governing and managing large volumes of disparate data
- ♦ Lack of data literacy and cultural reticence to break silos

Nonetheless the above, following views are shared by the speaker specifically:

1. Adopt best practices like encouraging all stakeholders like government organizations to review their data quality, involvement of all in national data strategies, deploying legal system to enable common usage of data
2. Develop analytical capabilities through data literacy, data science and data engineering, by benchmarking and close coordination with international community for sharing experiences in seamless data governance with respect to the updated frameworks and standards
3. Practice pro-active methodologies like develop data governance and data stewardship frameworks, effective communication with stakeholders for win-win scenario
4. Establish systems for the data organizations to build their own frameworks by following the guidelines of UN like – Provide data, Curate data, facilitate data dissemination, establish trust, encourage data usage, and Create regulation.

The Working Group on Data Stewardship of UN contributed to the emerging concepts like Data Governance and Data Stewardship. Workstreams are created which have contributed to the detailed explanation of the concepts and relevant case studies². With a strong cognition about the significance of governance and stewardship in data management, UN statistical commission, dedicated the 53rd session for providing supplementary reading on the five workstreams of the Working Group on Data

¹ Data stewardship discussion at the Conference of European Statisticians and in Canada.

² <https://unstats.un.org/unsd/statcom/53rd-session/documents/BG-3b-DSWG-E.pdf>

Stewardship, which covers data governance, equity, and inclusion, sharing and collaboration, links with the city data agenda and development of an overall conceptual framework. The document also highlights the need for the National Statistical Offices to take the responsibility of being data steward for the country.

Second: Mr. Robert Bumpstead | UK Statistics Authority

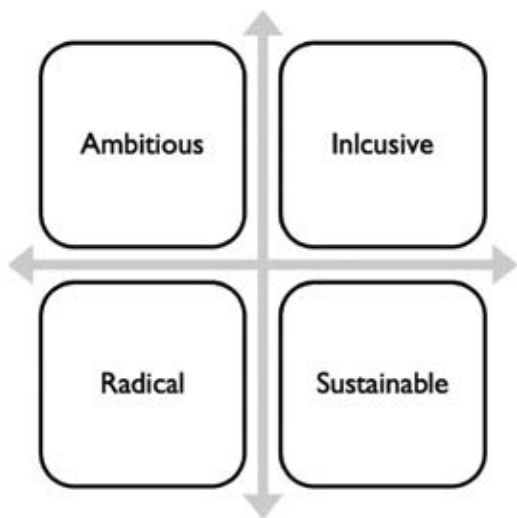
Rob is the National Statistician’s Chief of Staff and has responsibility for the UK Statistics Authority (UKSA) Central Policy Secretariat, developing and implementing statistical legislation and policy for the Office for National Statistics and across the UK’s Statistical System and Government Statistical Service (GSS). He is principal advisor to the National Statistician and to the Chair of the UK’s governing body, the Board of the UKSA.

Presentation title: Governance and Strategy

Summary of the presentation

This presentation provided an overview of the statistical system in the UK and how this is underpinned by the formulation of strategy. It is explained how the strategy has operated for the past years by making the statistical system independent entity and the prospects achieved there by. Further to providing amenities and other resources for smooth execution of data governance and strategy, code of practice for statistics as well as tracking the process as against the code can develop the data culture among all. For seamless implementation of the statistical strategy, four important principles are emphasized for the nations that are looking for upscaling their official statistical systems (figure 2).

Figure 1: Strategic Principles of UK’s Statistical Authority



The principles emphasize the statistical system to be Inclusive (considering the all the people); sustainable (for all the initiatives

planned); radical (abreast of exploring) and ambitious (more relevant and real-time statistics). Along with shedding spotlight on the statistical system in the UK, the recent growth of analytical profession and its national impact has been put forth. That is, the presentation cited that as the official statistical system is dependent on the professionals from all disciplines, apt mapping between the professionals of various sectors and cadres is to be well-maintained for effective and feasible insights. The concept of data governance strategy can be understood as the framework that connects people and processes in any data environment. Tasks of data steward and the processes involved in data governance are executed with a stringent road map, which can also be termed as data strategy road map³.

Second: Ms. Nicola Shearman | UK Statistics Authority

Nikki Shearman is currently an assistant deputy director in the Central Policy Secretariat of the UK Statistics Authority, with responsibility for International Relations. Previously she was head of the ONS legal team and for 15 years has played a leading role in the development of the UK’s statistical legal framework. She is also the chair of the UNECE taskforce on Modernizing Statistical Legislation.

Presentation title: Data usage, Stewardship and Ethics

Summary of the presentation

Presenter has demonstrated how the successful statistical system must evolve by imbibing the important concepts like data stewardship and data management ethics. To do so, the official statistical system is to be an independent body that reports without any favor and fear, keeping the public expression in interest and coordinating with other national and international organizations. It is also, affirmed that the job of statistical system should go beyond collecting statistics, by benchmarking to support of real-time quality data.

Affirming the need for statistics strategy, emerging concepts like data pipeline, 5-safes framework (safe project, safe setting, safe people, safe data, and safe output) that is required to encourage qualitative research work and the ethical body required for fostering such research environment is highlighted. Notwithstanding this, the deliberation also called for establishing a body for Statistical data ethics that carries out set of activities as mentioned:

- ♦ Public Good: The sue of data has clear benefits for users and serves the public good
- ♦ Confidentiality, data security: The data subject’s identity (whether person or organization) is protected, information is kept confidential and secure
- ♦ Methods and Quality: the risks and limits of new technologies

³ The Government Data Strategy and Roadmap, Government Chief Data Steward, September 2021. <https://www.data.govt.nz/leadership/strategy-and-roadmap/>.

- ♦ are considered and there is sufficient human oversight so that methods employed are consistent with recognized standards of integrity and quality
- ♦ Legal Compliance: Data used, and methods employed are consistent with legal such as the DPA, the human rights Act, the SRSQ and the common law duty of confidence
- ♦ Public views & engagement: The views of the public are considered in light of the data used and the perceived benefits of the research
- ♦ Transparency: The access, use and sharing of data is transparent, and is communicated clearly and accessibly to the public

From the discussion and case-studies of the 53rd working groups of UN, it is highlighted that data enabling environment is to be fostered in any nation, which should comprise of data ethics predominantly. Data Ethics is defined as going beyond existing legislation on privacy and data protection, such as the

European General Data Protection Regulation, and addresses the responsible processing and use of data in technologies like AI⁴. Having understood the necessity for maintaining data ethics in all sectors like health, immigration and others, many governments have already started establishing data ethics strategies for the respective data field^{5 6 7}.

Overall, the presentations of the session have re-empathized the need for formation of National Statistical Office and strong data management systems⁸, that not only work independently by framing statistical policies, plans and actions but also serves as the heart of the National data system. It is also proposed that the statistical office should discharge duties like a principal guide for data quality standards for all public data. As the statistics reflect the people they count, trust ought to be fostered and relevance of the data for the whole population is to be kept as a base of the policies and programs

4 <https://en.unesco.org/inclusivepolicylab/analytics/no-trust-no-data-%E2%80%93-how-digital-development-depends-ethics>

5 https://unece.org/sites/default/files/2021-11/HLG2021_Survey%20on%20Ethics%20management%20results.pdf

6 https://unece.org/sites/default/files/2021-11/S2_1_UnitedKingdom_Centre_for_Applied_Data_Ethics.pdf

7 United Nations Statistical Commission. E/CN.3/2022/5. Report of the Working Group on Data Stewardship for the 53rd session, 1-4 March 2022, Item 3(b).

8 Tata Trusts. (2019). India's First City Data Officer Recounting Our Learnings and Experiences from Pune.

Adoption of the Recommendations



Session 2: Data Usage in Measuring the Progress

Strengthening official statistics and administrative data to measure progress in child-related SDG indicators and inform policies for children

1. To invest in the unexplored potential of administrative data and sector management information systems to move towards real time monitoring of key social indicators.
2. The COVID 19 pandemic in 2020 deeply affected the functioning of traditional statistical systems, determining an urgent need for innovative approaches to monitoring and data collection, and the need for investing in strengthening national statistical systems, prioritizing investments and setting benchmarks for effectively producing data and make them available at the right time in the right hands.
3. To meet the demands of the SDGs and of development strategies, national statistical systems will have to adopt new technologies and expand the scope of their work. The integration of geospatial data with conventional sources of environmental and socio-economic data is particularly important. Earth observations from satellites and aircraft or other remote sensors can be combined with geo-located data from censuses, surveys, or other sources; these data can then be analyzed and manipulated through geographic information systems.

Improving measurement and delivering impact through enhanced national health information systems

4. Strengthen data systems to generate data to monitor health and health-related SDG targets and indicators, especially on cause-specific mortality data, health determinants, risks and morbidity, and data to monitor key components of universal health coverage.
5. Enhance sustainable capacity for implementing key interventions to improve health information systems including capacity to conduct population-based surveys and for the analysis and use of data to guide timely and evidence-based decisions.
6. Engage domestic and external partners to improve statistical capacity, increase data availability, quality and timely reporting of health-related data with relevant levels of disaggregation.

Improve access to health-related data and promote data sharing by treating data as a global public good.

7. The Role of Data in Monitoring and Predicting the Impact of Climate Change
8. While globally standardized data is important for setting the standards and benchmarking, data collection should be enhanced with local components, local tools and local expertise and increase international cooperation to address barriers to data collection, verification, and monitoring on climate change in developing countries, especially in the MENA region.
9. International development agencies have key roles to play in providing technical assistance to address barriers to the flow and absorption of remote sensing technologies that can enable statistical authorities across the MENA region to better detect, monitor, and measure the GHG emission practices of operators.
10. Call for NSOs and other members of national statistical systems to take active role in providing information related to hazardous events and disasters, and to identify practical steps needed for these organizations, in coordination with national agencies responsible for disaster risk management, to better support disaster risk management efforts. Considering the monitoring and reporting requirements of the Sendai Framework for Disaster Risk Reduction, the United Nations 2030 Agenda on Sustainable Development, and the Paris Agreement on climate change.

The usage of alternative data sources for rapid socio-economic analyses: lessons learned from COVID-19

11. One of the lessons learned from the Pandemic of COVID-19 is that Alternative Data Sources are important for Rapid Socioeconomic to quantify the economic cost.
12. The deployment of the satellite imagery, remote sensing tool and SURGE Data Hub are important for pre-disaster planning and post-disaster assessment, estimate economic consequences and macroeconomic impact on GDP and building damage detection.



1. Multidimensional data allows data to be modeled and viewed in multiple dimensions and discover hidden insights. It is important to identify those who left behind.

Producing high quality data for priority topics in the world of work

2. Collect and disseminate high quality data in a timely manner, standardize the collected data and the comprehensiveness of data are fundamental to advance social and economic justice through setting international labor standards
3. Dissemination of anonymized microdata of the labor force surveys (LFS) in all countries to fill data gaps.

Session 3: Future of Economic Statistics (Stewardship, Networks, and Ecosystems)

On Stewardship and Governance

4. The National Statistics Offices (NSOs) can act as a central driver and trusted partner to modernize the production of economic statistics and integrate data from various sources while guaranteeing high quality statistics, privacy, and confidentiality.
5. The National Statistics Offices (NSOs) should address users' needs in prioritizing the update of the system of economic statistics including the SNA update for 2025 and the related systems and classifications on economic statistics, and generate economic indicators for monitoring the national development strategy, and for measuring progress in implementing

sustainable development agenda 2030 and the 3rd national development strategy 2023-2030

6. Data governance is key to helping the government manage its internal and external data flows. It aligns people, processes, and technology, to help them understand data to transform it into a government asset.

On Data Ecosystems

7. To achieve a holistic and integrated approach to the use of the great volume of data required by governments today, modern data architectures and data ecosystems must be explored and implemented based on specific use cases with a focus on ensuring that an institutions data ecosystem is fit for purpose and utility.

On Networking and Partnership

8. Given the interconnected nature of all our institutions and organizations today, a federated, but centrally coordinated, architecture can be used to enhance and support the mission and utility of data in Government operations and activities and lead to more successful adoption of big data technologies for timely policymaking, real-time decision making, and assist with identifying emerging opportunities



1. and responding to unforeseen situations. Data governance is key to helping the government manage its internal and external data flows. It aligns people, processes, and technology, to help them understand data to transform it into a government asset
2. In a new data culture, the Planning and Statistics Authority of the State of Qatar would collaborate with a broad range of partners from the line Ministries, private sectors, Academia, Research centers and NGOs to produce trustworthy data for better decision-making by government, business, and the public at large. Moreover, the NSO and partners would educate society about how to correctly interpret the disseminated data, among others, using data visualizations and storytelling
3. The NSO to chair the task force and committees concerned with updating economic statistics and activating mechanisms for reviewing the guidelines.

Session 4: Precision in Sustainable Development with Artificial Intelligence

Mapping school locations using AI and high-resolution satellite imagery in support of the GIGA initiative

4. AI has been tested to replace or supplement human efforts to gather information. With a combination between the use of AI and human input, we can build a scalable and operational system to minimize the human efforts and time for data collection and validation.

5. Qatar PSA should work together in partnership with Qatar Computing Research institute (QCRI) and other partners to develop a scalable AI system that works equally in the developed world and the underdeveloped world.
6. Qatar PSA should support and promote the open-source policy for the data and algorithms to enhance the collaboration on the development of such a scalable AI system.

Usage of remote sensing for SDG indicators and flood detection

7. Integrating new data sources such as geospatial data to support timely, frequent and disaggregating reporting of SDG indicators and fill gaps in official statistic, particularly in remote areas
8. NSOs need to put in place the required coordination mechanisms with other national agencies that have mandates in relation to data provision
9. NSOs also need to enable their staff to use and produce new data sources and integrate these with them

Usage of AI/ML to monitor the global advancement towards sdfs

1. To invest in new technologies (such as AI, ML, NLP and CV) and adopt non-traditional data sources (such as social media, sensors, and drone images) to track and monitor the progress achieved against SDGs at national level. Such investment and adoption improve results, increases quality, reduces cost, and saves time for those who track and monitor SDGs implementation in those countries

Monitoring the sustainable development goals (SDGs) and AI

2. The evolving understanding of sustainable development is posing new challenges, increasing the level of complexity, for development decision makers. The statistical community must explore ways to respond to these demands, among other ways, by identifying how to use big data and AI/ML applications to support decision making. This must include addressing potential negative impacts of AI/ML applications
3. By advancing the data availability and analytical capacities, provide decision-makers with tools necessary to move into next-generation policies which provide more efficient and resilient ways to accelerate the achievement of the SDGs.

Session 5: Modernizing Statistical Ecosystem

Modernizing statistical legislations and coordination within national statistical systems

4. Adopt an open data culture to ensure public trust in facilitating access to public information supported by robust statistical legislation in compliance with the Fundamental Principles of Official Statistics and other international best practices through an efficient coordination mechanism within the national statistical systems (NSS).
5. Seek collaboration opportunities between the NSS as coordinators of the national statistical systems, and relevant international organizations in order to contribute to the efforts of modernizing the statistical legislations and institutionalizing coordination within the NSS and promoting open data culture.

Statistical evidence in the evolving data ecosystem

6. Strengthening the legislative and institutional structure of national data producers that ensures the role of national statistical offices in leading the modernization of the statistical ecosystem and increasing the efficiency of collaboration and coordination among data producers and users (e.g., policy

makers, researchers, academia, civil society organizations, the public, etc.).

7. Ensure the availability of timely, reliable, quality, and relevant statistical data for all users.
8. Strengthen the capacity of national statistical offices and other data producers to monitor and report the progress of the national and international initiatives such as the national development strategies and Sustainable Development Goals 2030.
9. Promote the use of growing advancement in technology for the timely compilation, processing, analysis, and dissemination of quality and reliable official data for policy makers.
10. Streamline the use of new data sources, methods, and tools to complement traditional sources in order to improve the timeliness, coverage, and quality of official data through collaboration and partnership, technical and capacity support, and information sharing.

Session 6: Data Stewardship, Data Governance, Data Strategies

Recommendations on data governance and stewardship

11. National statistical offices (NSOs) need to revisit national data governance, which could lead to changes in the national statistics Act. At the international level. United Nations Statistical Commission need to rethink of the fundamental principles of official statistics could be necessary, or maybe a supplement to the principles for the wider data community.
12. NSOs need to take the helm as the national data steward, and practice proactive - methodologies to develop data governance and data frameworks, effective communication with stakeholders. In line with the increasing use of additional data sources, the protection of privacy should be systematically evaluated, and privacy preserving techniques may prove very useful.
13. NSOs should receive continuous training in new methods and new technologies, including data science; and NSOs should gradually expand its labor force with data scientists, data engineers, and data analysts.

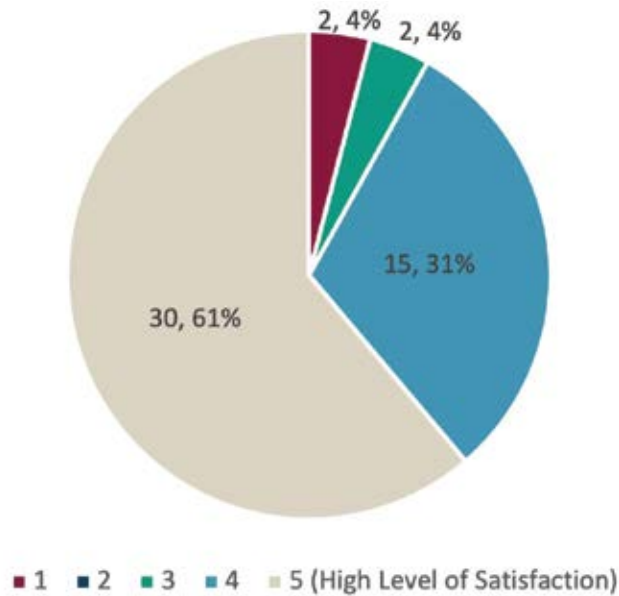
Participant's Opinions on the Regional Workshop



At the end of the workshop (day two) a QR Code was disseminated on the attendees' tables, and they were requested to fill an online evaluation form via Google Form, the form consist of 4 main scale questions. Were 49 responded to the online evaluation form. The results are as following:

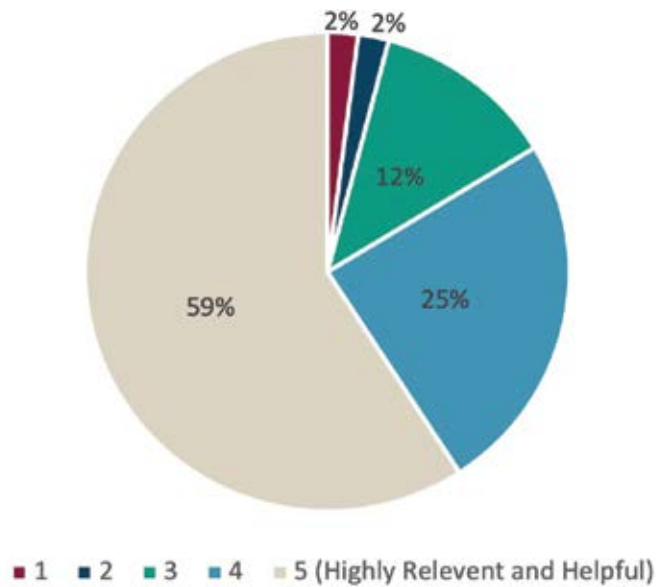
Q1: On a scale of (1-5), how you were satisfied with the workshop content?

Where five mean high level of satisfaction



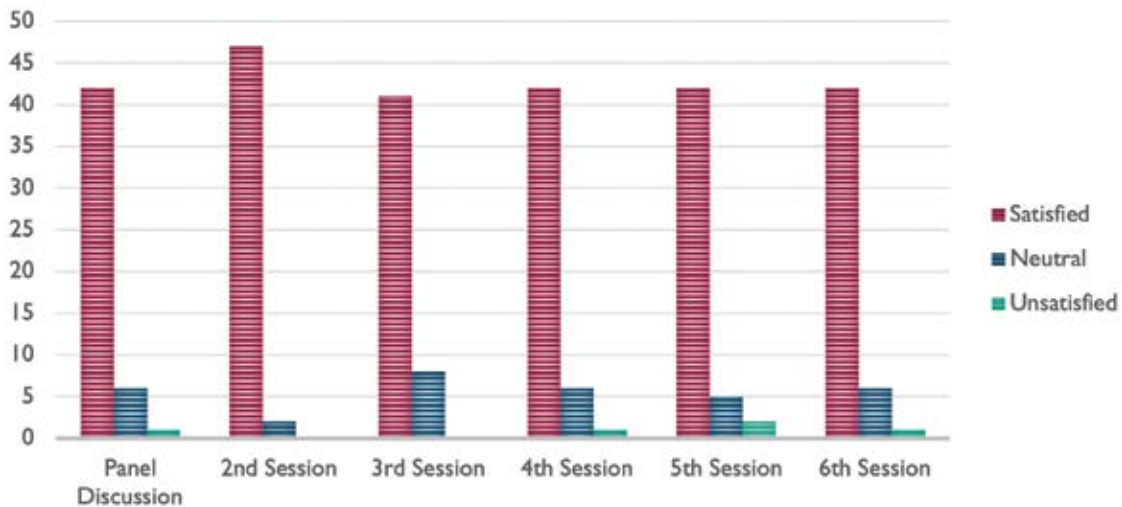
Q2: On scale of (1-5), was the content of the workshop relevant and helpful for your job?

Where five mean highly relevant and helpful



Q3: Please rate the following content of the workshop according to your satisfaction level.

Where five mean high level of satisfaction



Q4: Any additional suggestions regarding the sessions or overall agenda?

(Open ended)

Themes	Response
Activity	"A proposal to improve future workshops by adding sub-activities and increasing the time designated for panel discussions."
Time	"Time management needs to be improved." "When compared to the amount of information covered by the workshop, it is clear that the duration of sessions is short. Thus, we recommend that you increase the number of days, organize the workshop into morning and evening sessions, or reduce the number of speakers in future workshops." "The time designated for sessions is not enough. The workshop could have been organized over 3 days because the content of the sessions is valuable and needs more time." "The duration of panel discussions is short due to the large number of papers. Additionally, I wished there was a paper on geographic information systems in Qatar."
Local Experience	"I wished there was an activity showing our national achievement regarding the SDGs portal on the PSA's website and the reflection of the census results on the geographical maps"
Technical	"The simultaneous interpretation was not accurate, and sometimes unclear."

Annex 1: Agenda



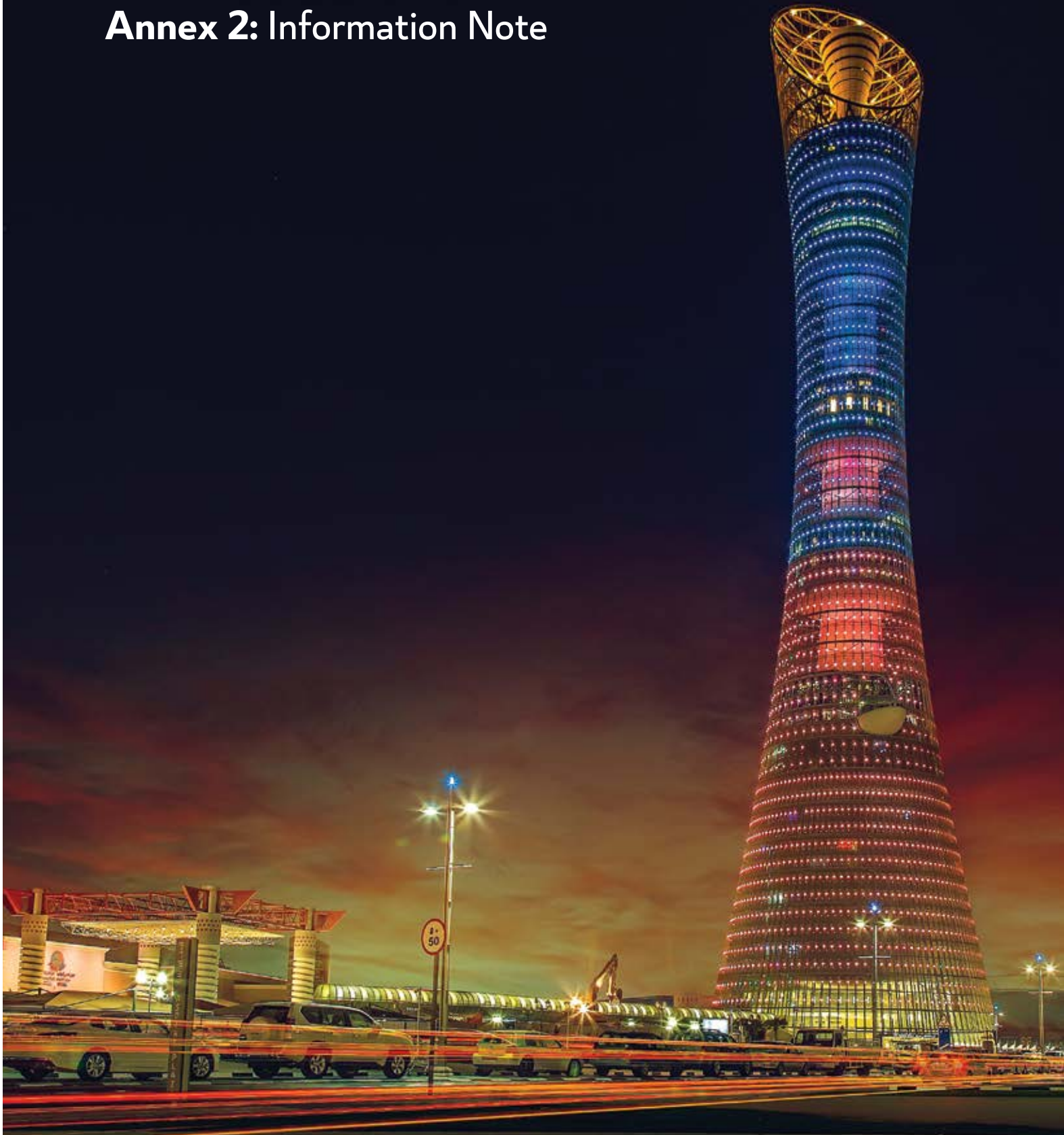
Annex 1: Agenda

Day 1: Wednesday, 21 September 2022	
08:00 – 09:00	Registration
09:00 – 09:15	Welcome and Inauguration of the Workshop Address by H.E. Dr. Saleh M. Al-Nabit, President of Planning and Statistics Authority. Address by Mr. Stefan Schweinfest; Director of the United Nation Statistics Division (UNSD)
09:15 – 09:25	Introducing the Workshop and The Expected Outcomes Dr. Ahmad Hussein
1st Session	Moderator: H.E. Mr. Mohammed Abdul Aziz Al Naimi, Assistant of the PSA President Panel Discussion: Data for Development Impact: Why We Need to Invest in Data
09:25 – 11:00	1. Ms. Mashael Ali Al Hammadi - Ministry of Communications and Information Technology 2. Sheikh Dr. Mohamed Bin Hamad Al Thani - Ministry of Public Health 3. Dr. Eng. Mohammed bin Saif Al-Kuwari - National Human Rights Committee 4. Mr. Mohammed Ali Al-Ghamdi - Qatar Charity 5. Dr. Khalid J. Al-Naama - Doha International Family Institute (DIFI)
11:00 – 11:10	Break
2nd Session	Chair: Dr. Khalid Ali Al-Quradaghi, Director of Information Systems and Advisor to the President's Office Title: Data Usage in Measuring the Progress
11:10 – 11:20	1. Strengthening Official Statistics and Administrative Data to Measure Progress among Children - Related SDG Indicators and Inform Policies for Children Mr. Leonardo Menchini - UNICEF
11:20 – 11:30	2. Improving Measurement and Delivering Impact Through Enhanced National Health Information Systems Dr. Henry Victor - WHO
11:30 – 11:40	3. The Usage of Alternative Data Sources for Rapid Socio-Economic Analyses: Lessons Learned from COVID-19 Dr. Vito Intini – UNDP (Online participation)
	4. Producing high quality data for priority topics in the world of work Mr. Yves Perardel – ILO (Online participation)
11:40 – 11:50	Discussion
11:50 – 12:15	Coffee and Prayer Break
3rd Session	Chair: Dr. Wafa Aboul Hosn, Chief of Section of Economic and Environment Statistics at ESCWA Title: Future of Economic Statistics (Stewardship, Networks, and Ecosystems) United Nations Economic and Social Commission for Western Asia (ESCWA)
12:15 – 12:30	1. Building Modern Data Ecosystem – Opportunities and Challenges Dr. Konrad Pesendorfer- General Authority for Statistics of the Kingdom of Saudi Arabia (GASTAT)(Online participation)
12:30 – 12:45	2. Developing Stewardship, Networks, and Ecosystems for The Economic Statistics in The Arab Region: Challenges and Opportunities Dr. Saleh Al-Kafri - Palestinian Central Bureau of Statistics (Online participation)
12:45– 13:00	3. Building Modern Data Ecosystem – Best Practices from the UN ESCWA Experience Mr. Ahmed Al-Awah - ESCWA
13:00 – 13:15	4. Canadian Experience in the Role of Networks of Economic Statistics in Data Stewardship Mr. Greg Peterson – Statistics Canada (Online participation)
13:15 – 13:30	Discussion
13:30 – 13:35	Closing Day 1
13:35 – 14:00	Lunch and Networking

Day 2: Thursday, 22 September 2022

08:30 – 08:40	Opening Day 2 with A Recap of Day 1
4th Session	Chair: Dr. Muhammad Imran, Senior Scientist at Qatar Computing Research Institute (QCRI) Title: Precision in Sustainable Development with Artificial Intelligence Qatar Computing Research Institute (QCRI)
08:40 – 08:55	Mapping School Locations Using AI and High-Resolution Satellite Imagery in Support of the Giga Initiative Dr. Dohyung Kim – UNICEF
08:55 – 09:10	Usage of Remote Sensing for SDG Indicators and Flood Detection Dr. Wafa Aboul Hosn – UN-ESCWA
09:10 – 09:25	Usage of AI/ML to Monitor the Global Advancement Towards SDGs Dr. Aladdin Shamoug – UNDP
09:25 – 09:40	Monitoring the Sustainable Development Goals (SDGs) and AI Dr. Gonzalo Pizarro – UNDP
09:40 – 09:50	Discussion
5th Session	Chair: Dr. Sharifa Noaman Al Emadi, Executive Director of Doha International Family Institute (DIFI) Title: Modernizing Statistical Ecosystem
09:50 – 10:05	1. Documentation of the Assistance Provided by The Organizations of Civil Society: Framework, Challenges, and Requirements: The Experience of Qatar Charity Mr. Mohamed Ali Al-Ghamdi – Qatar Charity
10:05 – 10:20	2. Efforts in Modernizing Statistical Legislations and Coordination within National Statistical Systems: A Regional Perspective Dr. Atila Karaman - SESRIC
10:20 – 10:35	3. Supporting the GCC Agenda with Statistical Evidence in the Evolving Data Ecosystem - Prospects and Challenges. Dr. Salah Al Muzahmi - GCC-STAT
10:35 – 10:40	Break
10:40 – 10:55	4. The Importance of Data in Guiding the Bank's Activities among 57 Member Countries Mr. Abu Camara - Institute of the Islamic Development Bank (IsDB)
10:55 – 11:10	5. National Strategies for Developing Statistics and Their Role in Supporting the Ability of Statistical Agencies To Manage and Govern Data for Development Dr. Hadi Al-Saidi - Arab Institute for Training and Research in Statistics (Amman) (Online participation)
11:10 – 11:25	6. The Role of Data in Monitoring and Predicting the Impact of Climate Change Dr. Damilola S. Olawuyi – Hamad Bin Khalifa University HBKU
11:25 – 11:35	Discussion
11:25 – 11:55	Coffee and Prayer Break
6th Session	Chair: Dr. Juliet Ibrahim, Director of E-Health Department, Ministry of Public Health Qatar Title: Data Stewardship, Data Governance, and Data Strategies
11:55 – 12:10	Data governance Vs. Data stewardship: What is the Role in Streamlining the National Statistical System? Malaysia's Experience Mr. Wan Mohd Shahrulnizam – Department of Statistics Malaysia (DOSM)
12:10 – 12:25	Data usage, Stewardship and Ethics Ms. Nicola SHEARMAN – UK Statistics Authority
12:25– 12:40	Governance and Strategy Mr. Robert Bumpstead– UK Statistics Authority
12:40 – 12:50	Discussion
7th Session	Chair: Dr. Ahmad Hussein - Planning & Statistics Authority Adoption of the Recommendations
12:50 – 13:15	Discussion and Adoption of the Recommendations
13:15 – 13:20	Closing of the workshop. - H.E. Mr. Mohammed Abdul Aziz Al Naimi
13:20 – 14:00	Lunch and Networking

Annex 2: Information Note



Annex 2: Information Note

The large-scale digitalization of various aspects of the social, economic and individual behaviors within and across countries resulted in a radical change in the nature and volumes of data on socio-economic developments. Its application is changing, with demand going beyond the traditional scope. Data is generated essentially everywhere: by use of mobile devices, GPS and other sensors, household appliances, spacecraft, and social networks. Its composition is becoming more varied and it is constantly updated. These data sources can be very useful for policy purposes of developing the 3rd Qatar National Development Strategy and mainstreaming the SDGs.

The range of data sources is also expanding, along with the generated data types including common quantitative and qualitative characteristics of various objects, processes, or phenomena, and textual, audio-visual, and other “technological” formats. New data can supplement or refine the results of previous observations, or even radically change them.

Due to the growth rate and increasing complexity of global processes, the role of official statistics has profoundly changed. The report of the fifty-third session of the United Nations Statistical Commission, Welcomed the report of the Working Group on Data Stewardship, appreciated the work accomplished. The report **“recommended the development of a framework outlining the definition and application of the data stewardship concept, the advantages of assigning the role of data steward to the national statistical office.”**

Expanding the role of official statistics.

The COVID 19 pandemic has highlighted a growing recognition among the decision-makers in Qatar of how important reliable detailed information is to understand many of the issues facing the national development strategies. There is an urgent need for a resilient and effective data ecosystem, as pressing problems and critical events are often unexpected. New and mutually beneficial partnerships are required to facilitate connecting data from different institutions. The expanding role of official statistics should consider, adapting governance and data stewardship to a digital society.

The Current, Statistical Act must reflect the needs of a modern digital national statistical system and address data gaps by broadening and deepening relationships with various ministries, institutions, universities, private sector, and the non-governmental organizations (NGOs).

The Planning and Statistics Authority (PSA) will initiate discussions with national partners on how they could be involved in the elaboration of national data strategy and encourage them to review their data quality, especially for administrative sources. The scope of PSA is widening, as new data sources become available and society's expectations are changing regarding what new information data and statistics can have provided. The framework

for official statistics should be enlarged to include the new role of PSA.

Innovation fueled by data can certainly be one of the major pillars where additional competitive advantages can be made, this is exactly the reason we need a data strategy in place. Taking into consideration the development of a data warehouse to disseminate accessible data to analyze, predict and improve clarity, and coherence of communication for a better decision making

Objectives of the workshop:

1. Shed light on addressing a solid data ecosystem to accelerate the emerging data and information needs to create prosperity and well-being for the society.
2. Put emphasis on the role of PSA in adapting governance, data stewardship, and data strategy
3. Deepening a good Data-Driven Culture for decisions, in support of the third National Development Strategy, realizing the importance of national partnership in the production, dissemination and use of statistics and data for evidence-based policy.

Expected outcomes:

After the workshop, the participants are expected to:

1. Share knowledge and best practices on the changing role of official statistics in the State of Qatar and its implications.
2. Exchange of information, practices and techniques to support the new changing role of official statistics in the state of Qatar and its implications on the 3rd National Development Strategy
3. Acquire Clear vision on the importance of data governance, data stewardship and data strategy for PSA and to the entire Data ecosystem in the state of Qatar.

Participants:

The workshop will be held in person in partnership with national, regional, UN and international organizations and the non-governmental organizations (NGOs). A number of national, regional and international experts will be invited to participate in the workshop, to be held in Doha during, 21-22 Sep. 2022. The official language of the workshop will be in Arabic, with simultaneous interpretation to and from English will be provided throughout the workshop sessions. The workshop will be broadcasted via the social media platforms.



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