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## **Doha Data Forum** for Innovation in Sustainable Development

22-23 October 2024







# Doha Data Forum

### for Innovation in Sustainable Development

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### FOREWORD

I am honored to present the final report of the "Doha Data Forum for Innovation in Sustainable Development", hosted and organized by the National Planning Council during 22-23 October 2024. This forum took place at a pivotal moment in our digital era, where Artificial Intelligence (AI), Machine Learning (ML), and Data Science have transformed how institutions and agencies approach decision-making at both national and international levels.

In today's world, data is not merely an asset; rather, it is a catalyst for innovation and progress. Harnessing its power requires integrating cutting-edge technologies, while fostering inclusive data ecosystems. This involves ensuring high-quality data, transparency, and accessibility for all; guided by the United Nations Fundamental Principles of Official Statistics. These are crucial for unlocking the immense potential of data-driven decisions across economic, social, and environmental domains.

The integration of AI, ML, and Data Science has revolutionized how we address challenges in data accessibility, analytics, and dissemination. Overcoming technological, economic, and social barriers requires investment in cloud computing, big data analytics, and advanced platforms for processing and sharing information. Building such ecosystems demands collaboration across sectors and the cultivation of a culture that values data literacy, promotes continuous training, and encourages active stakeholder participation in evidence-based decision-making.

As we advance, ensuring data privacy, security, and confidentiality remains paramount. Establishing trust among individuals and institutions is essential to encourage participation in data initiatives. This involves handling data ethically and responsibly while promoting community engagement in its collection and use.

The National Planning Council, alongside national partners, is committed to leveraging modern methodologies for data collection, processing, and dissemination. By embracing Al-driven models, machine learning algorithms, and data science advancements, we aim to extract insights from administrative records, big data, and other sources. Our efforts focus on making data openly accessible, fostering transparency, and enabling seamless access for citizens and decision-makers alike. Partnerships with academia, civil society, and the private sector are pivotal in introducing innovative solutions and fresh perspectives in our data ecosystem.

Official statistics, Data and tailored indicators are indispensable for achieving the Sustainable Development Goals (SDGs). These indicators provide the evidence required to formulate policies, monitor progress, and ensure no one is left behind—a core principle of the 2030 Agenda for Sustainable Development and recently the Pact of the Future.

The Doha Data Forum has played a transformative role in strengthening national data ecosystems. By promoting innovation and maximizing the value of data, it has enhanced policy-making and sustainable development efforts. This forum fosters collaboration and knowledge exchange, contributing to a more inclusive society while leveraging data to address complex societal challenges, including Qatar's Third National Development Strategy (2024-2030) and the Sustainable Development Agenda 2030.

At the forum's conclusion, participants adopted the Doha Declaration for Innovation in Sustainable Development, reinforcing the Forum as a platform for dialogue, innovation, and cooperation among ministries, international organizations, academia, civil society, and the private sector. It serves as a venue to explore emerging trends, challenges, and opportunities in data governance, accountability, and application.

The Forum also promotes the sharing of best practices, capacity building, and fostering year-round collaboration through working groups, virtual seminars, and innovative partnerships. Moving forward, the Doha Data Forum will continue to champion research and innovation in AI, machine learning, and data analytics, supporting evidence-based decision-making through targeted grants, funding mechanisms, and strengthened networks.

The journey to transform data ecosystems is ongoing, but the outcomes of this forum signal a promising future—one where data, powered by AI and Data Science, becomes a central pillar for inclusive, effective, and sustainable decision-making. We look forward to building on this momentum for the next edition of Doha Data Forum.

H.E. Dr. Abdulaziz bin Nasser bin Mubarak Al Khalifa

Secretary General

National Planning Council

### Acknowledgements

The success of the Doha Data Forum on Statistics and Data for Innovation in Sustainable Development, held during October 22-23, 2024, is the result of the collective efforts and unwavering support of numerous partners and organizations.

We extend our heartfelt gratitude to His Excellency Dr. Abdulaziz bin Nasser bin Mubarak Al Khalifa, Secretary-General, for his indispensable support, which was pivotal in achieving the Forum's objectives.

Our sincere thanks go to our co-organizers:

- The Qatar Computing Research Institute (QCRI), represented by Dr. Ahmed Elmagarmid;
- SESRIC, under the leadership of H.E. Ms. Zehra Selçuk;
- UNFPA Oman, led by Dr. Jocelyn Fenard;
- UNFPA Moldova, led by Dr. Karina Nersesyan.

We also wish to acknowledge the invaluable contributions of our moderators: Mr. Nasser Saleh Almohdi, Dr. Mohamed Imran, Eng. Dana Ahmad Al Salem, Mr. Saoud Al Shammari, Ms. Noora Al Rashidi, Mr. Hafs Abu Mallouh, and Mr. Salah Al Sahleh. Our sincere appreciation is extended to all the speakers who enriched the sessions with their insights and expertise.

The contributions of various departments within the National Planning Council (NPC) were instrumental in the planning and execution of this event. We extend our special thanks to:

- Public Relations and Communication, led by Mr. Abdullah Al Khanji;
- Information Systems, led by Ms. Dena Al Hail and Ms. Dana Ahmad Al Salem and her team;
- National Statistics Center, led by Mr. Ahmad Hassan Al Obaidli;
- Permanent Population Committee, led by Mr. Abdulhadi Al Marri
- Financial and Administrative Affairs, led by Sheikha Rawda Hamad Al Thani;
- Office of the Secretary General, led by Mr. Mohammed Faleh Al Hajri;
- Office of the Assistant Secretary General for National Planning and Policy Affairs, led by Mr. Raed Al Emadi;
- Office of the Assistant Secretary General for Council Affairs, led by Abdulaziz Al Fehani.

We further express our gratitude to the attendees and participants from ministries, institutions, universities, research centers, and non-governmental organizations, whose active engagement and contributions greatly enriched the Forum's discussions.

Special recognition is also due to the webinar facilitators: Ms. Hessa Al Malki, Dr. Ahmad Hussein, Ms. Moza Alhemaidi, and Ms. Dana Ahmad Al Salem.

We extend special thanks to the national statistical offices that attended and presented, including representatives from the UK Office of National Statistics, Moldova, Finland, Turkey, Malaysia, and Oman. Additional gratitude goes to the UN agencies present, including UNDP, UNICEF, WHO, UN Women, ILO, DESA/Population Division, and UNESCO. We also acknowledge the participation of leading companies such as PwC, Microsoft, and Gartner; universities, including Hamad Bin Khalifa University, Qatar University and Northwestern University; and development organizations such as the Islamic Development Bank and the Qatar Fund for Development.

Lastly, a heartfelt acknowledgment goes to the dedicated NPC team whose expertise and professionalism were integral to the Forum's success. This includes: Dr. Ahmad Hussein, the Forum organizer; Ms. Manar Yassin, Mr. Taha Anwar, Mr. Abdullah Abdulsalam Alnassan, Dr. Mohammad Al Sheyab, Dr. Mostafa Kharoufi, Mr. Bassam Fayez Bali, Ms. Haya Faisal Al-Thani, Dr. Mahasien Zien Abdalla, Dr. Saad Mohamed Khalil, Mr. Ahmed Menne, Ms. Eman Katah and Mr. Mohamed Zeinelabdein.

### Abbreviations

AI	Artificial Intelligence	QCRI	Qatar Computing Research Institute
DOSM	Department of Statistics Malaysia	RAP	Reproducible Analytical Pipelines
ECOSOC	United Nations Economic and Social Council	SDG	Sustainable Development Goals
GCC	Gulf Cooperation Council	SESRIC	Statistical, Economic and Social Research and Training Centre for Islamic Countries
GenAl	Generative Artificial Intelligence	UNDESA	United Nations Department of Economic and Social Affairs
HBKU	Hamad Bin Khalifa University	UNESCO	United Nations Educational, Scientific and Cultural Organization
ILO	International Labour Organization	UNDP	United Nations Development Programme
IsDB	Islamic Development Bank	UNICEF	United Nations International Children's Emergency Fund
MICS	Multiple Indicator Cluster Surveys	UNFPA	United Nations Population Fund
ONS	Office of National Statistics	UNWomen	United Nations for Women
PwC	PricewaterhouseCoopers	wно	World Health Organization

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### Introduction:

Under the generous patronage of His Excellency Sheikh Mohammed bin Abdul Rahman bin Jassim Al Thani, Prime Minister and Minister of Foreign Affairs, His Excellency Dr. Abdulaziz bin Nasser bin Mubarak Al Khalifa, Secretary General of the National Planning Council, opened the Doha Data Forum for Innovation in Sustainable Development 2024, which was organized by the National Planning Council over two days, October 22 and 23, 2024, in partnership with national, regional, and international institutions and organizations, which was held at The Ned Doha.

### Doha Data Forum 2024 and Expected Outcomes:

In today's rapidly evolving world, characterized by complex global challenges ranging from climate change to economic disparities and conflict, environmental degradation, food insecurity, the role of data as a catalyst for positive change has never been more critical. A data-driven approach, enhanced by advances in machine learning and artificial intelligence, has emerged as a powerful tool not only for driving innovation but also for shaping policies and strategies aimed at achieving sustainable development goals outlined in agendas such as the 3rd National Development Strategy (NDS3) at the national level and the United Nations Sustainable Development Goals 2030 (SDGs) at the international level.

The forum also acknowledges that the successful harnessing of data, AI, and machine learning for sustainable development requires collaborative efforts across various sectors and disciplines. Experts from diverse fields such as data science, economics, environmental studies, public policy, and social sciences converge to share their expertise, experiences, and best practices. Policymakers gain valuable insights into evidence-based decision-making, while practitioners exchange innovative methodologies and tools for data collection, analysis, and interpretation.

Crucially, the forum serves as a platform for stakeholders to not only exchange knowledge but also to catalyze concrete action towards leveraging data for sustainable development. Through interactive workshops, panel discussions, and networking sessions, participants are encouraged to forge partnerships, identify common challenges, and co-create solutions that harness the transformative potential of data.

### **Objectives:**

- 1. Explore the Intersection of Statistics, Data, and Sustainable Development: Foster discussions on how statistical methods and data analytics can contribute to innovative solutions for sustainable development challenges and shedding light on the latest developments in the National Data Project implemented by the National Planning Council.
- 2. Showcase Best Practices and Case Studies: Highlight successful initiatives, innovative methodologies, and case studies where data-driven approaches have led to positive impacts on achieving the NDS3 and sustainable development goals. And identify the challenges related to the availability of data in monitoring progress in implementing the aforementioned strategy.
- 3. Promote Collaboration and Partnership: Facilitate networking opportunities and collaboration among stakeholders from government, academia, industry, and civil society to catalyze collective action towards sustainable development goals.
- 4. Address Ethical and Governance Considerations: Discuss ethical, legal, and governance frameworks for responsible data use in sustainable development efforts, ensuring fairness, transparency, and accountability.
- 5. Empower Participants with Practical Knowledge and Skills: Offer sideline webinars, and capacity-building activities to enhance participants' understanding of statistical methods, data analytics tools, innovative technologies, and their application in sustainable development projects.

### **Expected Outcome:**

- 1. Enhanced Understanding: Participants will gain insights into the role of statistics and data analytics in driving innovation and addressing sustainability challenges, fostering a deeper understanding of the potential of data-driven approaches.
- Actionable strategies and Inspiration for Data-Driven Approaches: Participants will leave with concrete strategies and frameworks for applying data-driven approaches to achieve the NDS3 and SDGs. By showcasing innovative solutions and best practices, the forum will inspire and motivate participants to apply similar approaches in their respective fields, leading to measurable progress in sustainable development goals

- 3. Collaborative Partnerships: The forum will facilitate new partnerships and collaborations among stakeholders, fostering a network of individuals and organizations committed to leveraging data for sustainable development.
- 4. Policy and Practice Implications: Discussions and deliberations during the forum will inform policy development and practice implementation in the use of data for sustainable development, leading to more effective and impactful interventions.
- 5. Capacity Building: Participants will acquire practical knowledge, skills, and tools through workshops, training sessions cutting-edge data technologies, empowering them to harness data for innovation in sustainable development projects.

### Doha Data Forum Partners:

250 participants participated in the forum in person and about 600 remotely. The forum included a number of distinguished experts in diverse fields, such as data science, data technology, economics, environmental studies, public policy, social sciences, and statistics.

### Participants:

A number of local government agencies participated in the forum, including the Ministry of Justice, the Ministry of Finance, the Ministry of Education and Higher Education, the Ministry of Public Health, the Ministry of Communications, the Ministry of Commerce and Industry, the Ministry of Social Development and Family, Qatar Development Bank, the Ministry of Municipality, the Ministry of Environment and Climate Change, the Ministry of Endowments and Islamic affairs, Family Counseling Centre, the National Human Rights Committee, the Permanent Population Committee, Vodafone, the Emiri Diwan, Kahramaa, the Qatar News Agency, the private sector, and universities, research centers such as Qatar University, Hamad Bin Khalifa University, and the Qatar Computing Research Institute.

### Speakers:

- 1. United Nations organizations such as UNICEF, UNDP, UN Women, ILO, UNESCO, UNFPA from the Oman Sub-Office and Moldova Regional Office, UN Population Division/Department of Economic and Social Affairs, and World Health Organization.
- 2. Regional organizations: SESRIC Ankara, the Gulf Statistics Center, and the Islamic Development Institute.
- 3. At the country level, the Department of Statistics Malaysia (DOSM), the UK Office for National Statistics (ONS), Statistics Finland, the Moldovan Statistical institute, and the Turkish Statistical Institute.
- 4. Private and Consulting companies such as Gartner, Microsoft, and PwC.

### **Sideline Activities**

framework of the Doha Data Forum, the National Planning Council organized four webinars that included multiple topics on the following:

- 1. Gender statistics,
- 2. Data visualization,
- 3. How to build an environmental sustainability data strategy,
- 4. Measuring progress in achieving the sustainable development goals for children.

### Speech of H.E. the Secretary General:

#### Excellencies,

Ladies and gentlemen

May God's Peace, Mercy and Blessings be upon you.

Under the esteemed patronage of His Excellency, the Prime Minister and Minister of Foreign Affairs, I am delighted to meet you today at the Doha Data Forum, which brings together many prominent figures from government agencies as well as local and international organizations.

At the National Planning Council (NPC), we are currently preparing the National Strategy of Data and Statistics, which is set for launch during the last quarter of this year. This strategy intends to meet the pressing needs in the era of the digital revolution, recognizing the pivotal and critical role of data and statistics in driving informed and sustainable decision-making.

The strategy we are finalizing is centered on the development of an integrated data management system. It is not merely a regulatory tool; rather, it represents a holistic vision designed to lead the national data and statistics agenda. This strategy marks a new milestone in advancing cross-sector integration and providing precise information and data needed to support planning and development processes, in line with the Qatar National Vision 2030.



Through this strategy, we aspire to develop an advanced infrastructure that provides access to high-quality and secure data, while strengthening data governance mechanisms and ensuring privacy and security. This initiative is an open call for innovation, as we strive to empower national entities to deliver smart solutions and make the most of modern technologies such as artificial intelligence and advanced analytics.

#### Ladies and gentlemen,

The sessions of the 2024 Doha Data Forum will cover a wide range of topics related to innovation and sustainable development. They will also include discussions on data and artificial intelligence and their role in enhancing official statistical systems, as well as the use of geospatial data in disaster management. Other sessions will also address how data can be leveraged to analyze progress in achieving the SDGs, the use of artificial intelligence in the service of society, and the development of data governance.

There is an emphasis on empowering individuals to make informed decisions through data, while exploring the latest trends in analytics and data for 2024. The forum will also address innovation in the field of official statistics and the future of sustainable development in the Gulf States, highlighting the importance of improving data collection to support developmental strategies. Ladies and gentlemen,

In light of the rapid advancements that we are witnessing today in the sphere of data and technology, the National Training Center for Data and Statistics emerges as another vital component of the system we are building. Through this center, we aim to develop national cadres capable of leveraging the power of data and statistics and building national capacities across various data-related fields.

I am pleased to announce the establishment of this center, which will serve as a hub for continuous learning, and an incubator for the development of advanced skills in data management and analysis, machine learning, advanced analytics, and modern data technologies.

Since we believe in the importance of data innovation, I am also honored to announce the launch of "Qatar Data Hackathon", an ambitious initiative that aims to encourage innovators and thinkers in the technology and data sectors. This initiative is not just a competition, but a platform to empower young talents and stimulate innovative thinking to find practical solutions to the challenges facing different sectors. Through this initiative, we will spotlight smart ideas that contribute to improving the quality of life and enhancing performance in various fields.

In conclusion,

I would like to express my deep thanks and sincere gratitude to all the partners who are working with the National Planning Council to bring this vision to life, especially the Ministry of Communications and Information Technology. We are confident that these collaborative efforts will lead to paradigm shifts, enhancing the quality of national statistics and supporting Qatar's future as a leader in the field of data and statistics.

Peace, mercy and blessings of God be upon you.



### **1st Session:**

### Sustainable Development and Artificial Intelligence (AI):

### Moderator: Dr. Muhammad Imran

Qatar Computing Research Institute - Hamad Bin Khalifa University

### 1st Presentation: Arabic Large Language Model:

## Speaker: Dr. Mohammad Eltabakh, Qatar Computing Research Institute - Hamad Bin Khalifa University

Dr. Mohammad Eltabakh, a Senior Data Science Expert at Qatar Computing Research Institute since 2022. Formerly an associate professor at Worcester Polytechnic Institute in the United States, Dr. Eltabakh has published multiple papers in the fields of big data, data management systems, and data analytics. He holds Ph.D. and Master's degree in Computer Science from Purdue University, USA.

### Summary of the 1st Presentation:

Large Language Models (LLMs) help provide highly reliable data from their sources by being able to read files intended for manual reading such as images, tables and charts. These models can infer, analyze, and summarize information, delivering the required visuals, summaries, and results that speed up and stream-line data analysis and interpretation in an understandable language. However, such models are costly and require a lot of work.

The Arabic content of popular models, such as Chat GPT, is limited and often lacks sensitivity to Arabic context, culture, and values. The "Fanar" project, therefore, represents a large Arabic model developed at QCRI as a national project that is being carried out in collaboration with several prestigious partners. Fanar aims at preserving the Arabic language, local traditions, culture and values in the era of Generative AI. The Fanar model has been piloted in partnership with the National Planning Council as part of its first phase.

### 2nd Presentation: Addressing Complex Risks for De-risking Development:

#### Speaker: Ms. Minako Manome, United Nations Development Programme (UNDP)

Ms. Minako Manome, Senior Advisor and Head of the UNDP Risk Anticipation Hub, New York. Minako has worked at UNDP Syria, Jordan, Nepal, the Bureau for Crisis Response and Recovery, UNDP Headquarters (2011-2014) and UNICEF Timor Leste .(2010)

#### Summary of the 2nd Presentation:

- Artificial intelligence (AI) and other emerging technologies play a pivotal role in the Global Digital Compact, which focuses on harnessing modern technologies to enable large-scale sustainable development across various fields. AI is widely used in many areas of development in UN programs such as gender, energy issues, climate, and disasters.
- Todays and future risks are complex and interconnected, multiplicative, and multidimensional, often
  resulting in cascading failures and shocks that may trigger new crises or exacerbate existing ones.
  In this context, risk anticipation and prevention stand out as a proactive, coordinated, and effective
  approach to addressing such challenges and safeguarding development gains—whether these risks
  are regulatory, associated with the economies of countries, or external risks associated with sudden
  changes and surrounding conditions.
- Al helps produce rapid and timely analytics, leveraging satellite imagery, social media data, and news reports, in providing multidimensional analytics and in guiding responses to complex risks. This enables forward-looking preparedness and risk management, moving away from traditional methods and the inherent risks of deploying experts in the field.
- Among key data gaps requiring attention are the lack of accurate data, the gaps in procedures of
  effective data organization and storage within massive knowledge repositories, the gap in interlinking
  different data systems, the gap in decision-making that encompasses qualitative analysis of data and
  its use for forward-looking planning, and human factors that affect the use of data to guide policies
  and decisions.

## 3rd Presentation: From Social Media to Action: Harnessing Geospatial Data and Artificial Intelligence (AI) for Smarter Disaster Management:

#### Speaker: Dr. Reem Suwaileh, Hamad Bin Khalifa University

Dr. Reem Suwaileh, a researcher at Qatar University who holds a PhD (2023) in Computer Engineering from Qatar University. Her research interest involves Information Retrieval (IR) and Natural Language Processing (NLP). She contributed to organizing several international scientific conferences and presenting scientific papers.

#### Summary of the 3rd Presentation:

- In today's world, social media platforms have become the primary source for real-time updates on local and global events, including disasters. News agencies, disaster response authorities. Policymakers across various sectors utilize these platforms to collect and analyze data due to the time-effectiveness of information sharing.
- Geographic information is crucial for effective disaster management, both for affected individuals and
  response authorities. It helps in pinpointing the locations of incidents, affected individuals, shelters,
  and other critical sites, therefore enhancing the effectiveness and efficiency of response activities
  such as directing rescue teams and planning evacuations to mitigate disaster impacts.
- Traditional methods of collecting disaster data face challenges such as high cost, risks to field workers, and restrictions imposed by authorities related to social and political issues. Additionally, these methods often fail to provide data in a timely manner.
- The process of implementing AI solutions to address the needs of policymakers follows four stages: defining the dataset, defining tasks, developing systems and piloting systems. The presentation highlighted examples of disaster data models from various events on social media platforms. It also introduced the "Badr" model and Idrisi datasets, illustrating how such stages are implemented and used to provide data for crisis management.

### 4th Presentation: Artificial Intelligence Applications for Social Good:

### Speaker: Dr. Muhammad Imran, Qatar Computing Research Institute - Hamad Bin Khalifa University

Dr. Mohammed Imran, a Senior Scientist and Lead of the Crisis Computing team at QCRI. He has over 130 peer-reviewed publications in various fields focusing on the application of artificial intelligence, machine learning and big data analytics to improve decision-making. He holds a PhD in 2013 from the University of Trento in Italy.

### Summary of the 4th Presentation:

- Explore the transformative potential of AI in advancing social good and enhancing disaster response efforts, including the processing of social platform data such as images, messages, satellite data, machine learning, data analytics and remote sensing, to address critical humanitarian challenges, spanning from enhancing disaster preparedness and response to impact assessment.
- The experience of the Pakistan floods (2022), the Turkey-Syria earthquake (2023), the 2020 Beirut bombings and Hurricane Dorian were highlighted as real-life examples and case studies that illustrate the innovative ways in which AI is making a difference in saving lives and building resilient communities. This is done by analyzing the damage and identifying the needs and the places and groups most affected to effectively guide the response by providing timely and important information.

### **Session Discussion:**

- The panelists emphasized the issue of data localization and adaptation to contextual needs, while considering the cultural dimensions and serving the goals of each country. They noted that a thorough understanding of each country's goals is crucial for tailoring programs to the local context. In addition, the panelists stressed the need for collaboration with the local populations as an essential requirement since they are the primary data holders.
- 2. They tackled the issue of AI ability to estimate damage and the responsible parties. It was noted that international standards were established by the Red Cross for damage assessment. Further, models have been trained to apply these standards.
- 3. The panelists discussed the issue of prolonged conflicts, during which the means of communication are disrupted and biased narratives emerge from one party. They explained that alternative communication methods are typically employed for response efforts, and that AI can adapt to handling these situations. Additionally, it was pointed out that the processes of analysis and documentation ensure the credibility of the data on which the model is trained, accounting for the biases and the backgrounds of data sources through layers of verification.
- 4. The Fanar model and future plans were also discussed. The panelists announced that the first version will be available for use in December, with subsequent versions to follow. The panelists also high-lighted that the model was trained on different dialects and is specifically designed to align with Arab values and culture. As for the potential for errors low-quality data, the panelists clarified that the model incorporates filters and layers of verification and qualitative analysis to ensure data integrity.



### 2nd Session:

### Data and Artificial Intelligence (AI):

### Moderator: Mr. Nasser Saleh Al Mahdi

National Planning Council .

### 1st Presentation: Leveraging Reproducibility in Statistical System Production:

### Speaker: Mr. Michael Cole, UK Office for National Statistics (ONS)

Mr. Cole is a government statistician who has worked in a range of different departments across the UK Civil Service. He has been in the ONS since 2021. Michael is currently Head of the Statistical Infrastructure and Design (SID) Hub within the Methodology and Quality Directorate of ONS.

### Summary of the 1st Presentation:

- The presentations focused on how the analytical process to produce a statistical or analytical report or publication can be made reproducible.
- A manual process is prone to quality risk, laborious, hard to reproduce, slow and resource intensive.
- The best way to ensure reproducibility is to use Reproducible Analytical Pipelines system (RAP).
- RAP benefits are realized through efficient resource utilization and improved quality, particularly when where processes are properly documented.

- To implement RAP, essential components include open-source top-level tool buy-ins and continuous capacity building.
- Key challenges include skills retention, coding capability, RAP management, coding culture, technology, and risk aversion.

### 2nd Presentation: Harnessing Artificial Intelligence (AI) and Machine Learning for Advancing Official Statistics Turkish Statistical Institute (TurkStat) Experience:

### Speaker: Mr. Bilal Kurban, Turkish Statistical Institute (TurkStat)

Mr. Kurban is a data scientist and AI expert currently leading the Artificial Intelligence and Data Analysis Unit at the Turkish Statistical Institute (TurkStat). With over two decades of experience in statistics and data analytics, Mr. Kurban has been at the forefront of modernizing Turkey's statistical infrastructure.

### Summary of the 2nd Presentation:

- The presentation highlighted the Generic Machine Learning Process Model in TurkStat structured around seven stages with defined functions at each stage and a decision map to choose an ML algorithm
- Mr. Kurban then highlighted the role of AI in transforming official statistics in TurkStat by enhancing the data collection, processing and analysis, enabling automation and speed and accuracy in transforming the production of TurkStat official statistics.
- In conclusion, the presenter outlined the future directions of TurkStat, focusing on AI and Ethics in Official Statistics, ethical considerations and data privacy and security. He Addressed biases in AI models, responsible innovation and balancing automation with transparency.

### 3rd Presentation: Bringing Data into the Era of Artificial Intelligence (AI):

### Speaker: Mr. Ahmad Debbas, Microsoft

Mr. Debbas currently serves as the Data & AI Lead at Microsoft, focusing on sectors like public services, energy, aviation, and retail. He has held several key roles at Microsoft, including Technology Lead for Azure Data & AI and Lead Cloud Solution Architect for Data/AI.

### Summary of the 3rd Presentation:

- Mr. Debbas presented a synopsis of the present technological changes, history, impact and opportunities for innovation across all industries as a result of the rapidly evolving technological landscape in the era of the Al Data.
- The presentation explored how organizations can harness the power of Data and AI to drive digital transformation, create value and remain competitive.

- Mr. Dabbas highlighted Microsoft's AI strategy-based technologies and apps.
- The presentation focused specifically on Microsoft Fabric data analysis and Azure Open-AI platforms designed to accelerate innovation and empower businesses on their journey towards Generative AI (GenAI).
- The presenter highlighted Microsoft AI commitment to protect client data and provided a skilling curriculum for Business Executives, AI engineers, data scientists, and Developer/ Data Analyst/ Engineer

### 4th Presentation: Modernization of NSOs in OIC Countries through Digitalization, Machine Learning and Artificial Intelligence (AI):

## Speaker: Mr. Onur ÇAĞLAR, The Statistical, Economic and Social Research and Training Centre for Islamic Countries (SESRIC)

Mr. Çağlar is the Director of the Statistics and Information Department at SESRIC where he leads initiatives to strengthen statistical capacity across OIC Member Countries. Before joining SESRIC, Mr. Çağlar worked in the Turkish public sector, where he focused on investment promotion and socio-economic development strategies.

### Summary of the 4th Presentation:

- Mr. Caglar's presentation focussed on the role of SESRIC as the entity responsible for strengthening and modernizing the statistical capacity of NSOs in OIC member countries.
- The presentation highlighted the requirements of statistical production evolution in data collection and data governance, noting key experiences from 3 OIC member countries.
- The presentation showcased the findings of the Inclination Survey conducted by SESRIC, which aimed to assess the implementation of activities and projects related to the modernisation of the NSOs in OIC member countries. Key areas of focus included digitalisation, and other emerging issues in official statistics across OIC countries.
- The presentation detailed the survey results, highlighting various themes of common interest such as digitalization process, cyber security, machine learning and Al.
- The survey results will serve as a roadmap to guide future efforts in the modernisation of NSOs across OIC member countries.



### **3rd Session:**

### Data Analysis for Sustainable Development:

Moderator: Mr. Hafs Abumallouh

National Planning Council

## 1st Presentation: Advancing Data Governance and Integration: The Role of DOSM in Modernizing National Statistical Systems:

### Speaker: Dr. Mohammad Uzir, Department of Statistics Malaysia (DOSM)

Dr. Uzir has got wide international experience in the field of statistics, He was appointed in different leading positions of international statistical positions as well as international committees. He also served as a member of the Working Group Open Data, ASEAN Community Statistical System (ACSS), and OIC Statistical Commission (OIC-StatCom). Currently he occupies the position of Chief Statistician- Department of Statistics Malaysia.

#### Summary of the 1st Presentation:

Dr. Uzir outlined the Malaysian experience and the role of the Department of Statistics Malaysia (DOSM) in modernizing statistical systems. He noted that such modernization was inevitable in the new digital era and data-driven decision-making, which is crucial for effective governance and strategic planning.

In his presentation, he highlighted the following issues:

- The emergence of a new data ecosystem necessitates a comprehensive approach to data ecosystem management, highlighting the principles that guide National Statistical Offices (NSOs) in this new environment.
- Importance of data integrity and privacy protection
- Importance of strategic integration of statistical insights into policy formulation and decision-making processes.

- Importance of collaborations with government entities and international partners to strengthen statistical practices and enhancing the overall quality of data.
- To strengthen governance, a National Statistics and Data Council was established as the highest advisory body with regards to national data and analysis in the country that will provide guidelines to strengthen the management of the national statistics system.
- To enhance analytic expertise among civil service, DOSM has established preliminary Chief Data Officers (CDOs)
- Integrating administrative data helps DOSM to reduce redundancies, improve data quality, and provide a more holistic view of socio-economic indicators. This approach involves consolidating data from various government and administrative sources to create a comprehensive, accurate, and timely dataset.

### 2nd Presentation: Progress Towards Achieving the SDGs in IsDB Member Countries: Challenges and Opportunities:

### Speaker: Dr. Arif Oduncu, Islamic Development Bank (IsDB)

Dr. Arif Oduncu is a Senior Economist at the Economic Research Division in the Islamic Development Bank. His research areas include the socio-economic development challenges and opportunities of developing countries, obstacles to improving cooperation and integration among developing countries, and strengths and weaknesses of developing countries achieving green, inclusive, and sustainable growth.

### Summary of the 2nd Presentation:

- Dr. Oduncu highlighted the importance of the SDGs to ensure prosperity for all by 2030 including the member countries of IsDB which encompass many developing countries. The assessment of how far IsDB MCs have progressed in achieving the SDGs is crucial in understanding their developmental landscape. In conclusion, IsDB and its partners must focus on accelerating progress in the most challenging areas, ensuring that no one is left behind in the journey towards a more sustainable, equitable, and prosperous future for all IsDB Member Countries.
- Other highlighted points in his presentation can be summarized as follows:
- While the global average progress in achieving SDGs is about 66.3, the IsDB member countries' average is 62.1%.
- There are wide differences in challenges across MCs to achieve SDGs.
- The most challenging goals in IsDB MCs are SDG 5 (Gender Equality) and SDG9 (Industry, Innovation, and Infrastructure).
- The best performance was in SDG12 (Responsible production and consumption) and SDG13 (Climate Action).
- IsDB plays a pivotal role in supporting the MCs in addressing the challenges associated with achieving the SDGs.

## 3rd Presentation: Using Open SDG to Create National Reporting Platforms for Sustainable Development Goals (SDG) Data:

### Speaker: Ms. Sarah Phelps, UK Office for National Statistics (ONS)

Ms. Sara Phelps works as an International Policy Advisor for the UK Statistics Authority / Office for National Statistics (ONS). Sarah's expertise was instrumental in creating a network of experts, delivering project communications, and developing a series of training webinars. She has extensive experience in delivering successful marketing campaigns, managing events, and communicating effectively within the cruise and travel industry.

#### Summary of the 3rd Presentation:

Ms. Sara emphasized the significance of using open SDG as a powerful tool for countries to share their progress toward achieving the SDGs. By leveraging open data principles, Open SDG enhances accountability and public engagement. Sara's presentation highlighted the following points:

- Key features of the open SDG include Open source; free; multilingual; supports SDMX; table, chart, and map display; disaggregation; User- centred; accessible; fully customisable; collaborative; search engine optimization; and progressive application.
- Over 55 organisations across the world, including both countries and regions, now use Open SDG to create their own websites to disseminate, visualise and download SDG-related data.
- Available support by the Office of National Statistics include:
  - 1. Maintain and develop Open SDG as a platform for all users
  - 2. Provide written and video guidance for all users.
  - 3. Provide additional assistance where needed.
  - 4. Able to extensively support some countries through our International Development Team.
  - 5. Provide virtual and in-country workshops.
  - 6. Collaborate with other statistical organisations to improve Open SDG and National Statistics Office reporting including United Nations Statistics Division (UNSD).
  - 7. Part of the SDMX-SDG Working Group run by UNSD.



# **Day 2:** Wednesday, 23 October 2024



### 4th Session:

# Data Literacy and Empowering Individuals to Make Informed Decisions:

### Moderator: Ms. Nada Al Mahmeed

Civil Service and Government Development Affairs

### 1st Presentation: Top Trends in Data and Analytics 2024:

### Speaker: Mr. Ludovic Veale, Gartner

Mr. Ludovic Veale, Executive Partner of Gartner, London, UK. With over twenty-five years of experience advising on advanced data and analytics solutions for multiple clients, Ludovic has held Data & Analytics leadership roles for top tier global companies as well as consulting roles with the big4 focusing on BI, Data Management and Advanced Analytics.

### Summary of the 1st Presentation:

- Data and analytics administrators face several challenges in aligning the requirements of technology and the organization to drive the strategy. These challenges can be categorized as follows: strategic challenges such as lack of innovation and flexibility in data management; funding challenges such as insufficient or poor investments; technical challenges represented in the recurring failure of some systems; regulatory challenges such as restricted authority of data teams and their use of data to guide decisions; and HR challenges such as lack of competencies in the field of data.
- There are four key data trends in 2024: a shift from focusing on good enough data to betting on the business, from chaos to managed complexity, from a single source of truth to a deluge of distrust, and from overloaded to empowered workforce.

- Artificial Intelligence is not the sole driver of rapid change in data and analytics. There is a rapid evolution in how and where analytics are deployed, from the next-generation augmented UXs onwards; authoring and running large-scale data and analytics; and decision intelligence engineering to enable data and analytics at the edge.
- Taking action on the most important trends can help organizations anticipate change, make critical decisions, and enhance business efficiency. Moreover, understanding their commercial impact will allow organizations to optimize resources and transform society over the next three years.

### 2nd Presentation: Data Governance:

### Speaker: Ms. Mari Ylä-Jarkko, Statistics Finland

Ms. Mari Ylä-Jarkko, Director of Data and Statistics Services at Statistics Finland, with three decades of experience in various statistical fields. She is a leader in national and international official data, as well as a member of several national steering groups on data policy. Mari holds a master's degree in Statistics from the University of Joensuu.

### Summary of the 2nd Presentation:

- We are living in a data-driven world, where everyone agrees that decision-making should be based on data and facts. The statistical offices have been working with data for centuries: collecting, validating, and analyzing data and then publishing statistics. In the present times, data is available everywhere. Hence, the role of statistical offices is different in the new context of providing up-to-date data of high quality and enabling the use of data.
- Statistics Finland is one of the first statistical bureaus in the world in addressing the issues of data quality and the use of data beyond statistical purposes. The presentation included examples on how Statistics Finland has developed Data Quality Framework for all data producers, how it has participated in developing new registers in the public sector as well as publishing experimental statistics. The presentation included examples on how statistical office can promote access to unit level data for research and decision-making.
- The presentation addressed the need for promoting data governance by collaboration among parties to ensure the provision of high-quality data. This includes facilitating access, registration, and licensing of data to prevent misuse, in addition to addressing data security issues and ensuring that data is not used to judge individuals.

### 3rd Presentation: Bridging the Skills Gap: Mapping QNOC to ESCO for Sustainable Workforce Development in Qatar:

### Speaker: Mr. Andrea Petrelli, International Labour Organization (ILO)

Mr. Andrea Petrelli, a Labor and Social Protection Economist with over eight years of experience in the GCC and MENA regions. He currently serves as a Labour Market Technical Officer at the International Labour Organization (ILO) in Doha, Qatar. He holds an MA in International Economics from Johns Hopkins University in Washington, DC and an MBA from Milan's Graduate School of Management.

#### Summary of the 3rd Presentation:

- The presentation highlighted the mapping of the Qatar National Occupational Classification (QNOC) initiative aligned with the European Skills, Competencies, Qualifications and Occupations (ESCO). As part of Qatar's ongoing efforts to create a knowledge-based economy, the mapping will integrate detailed occupational classifications with pertinent skills data, thereby promoting the Labour Market Information System (LMIS) initiative currently being developed by the Ministry of Labour (MOL).
- By leveraging this classification, Qatar can more effectively track and address skills gaps, facilitate job matching, and make informed policy decisions to support sustainable development. This initiative highlights the pivotal role of data in driving strategic workforce planning and promoting a labor market prepared for future challenges.

#### Session Discussion:

- The key factors for understanding data go much more beyond mere access; they encompass, among others, its effective use. The panelists highlighted the need for data localization and leading a cultural shift towards data as enablers, with artificial intelligence serving as a supportive element in this context. Understanding needs and building trust are crucial, in addition to building organizational competencies at all levels, maintaining frequent feedback loops, and practicing active listening as critical elements for comprehending data and driving a data culture transformation.
- 2. The discussion also addressed the difference between the globally recognized three-digit coding system and the GCC-adopted seven-digit coding for classifying qualifications and skills. The panelists responded that the use of the three-digit coding will not hinder the use of the applicable seven-digit coding. The goal is to find a quick way to identify skills gaps, as ESCO includes specifications for the required knowledge levels, education, and skills to pinpoint competency gaps.



### **5th Session:**

### Official Statistics and the Future of Sustainable Development:

#### Moderator: Ms. Noora Al Rashdi

National Planning Council

### 1st Presentation: Qatar Multiple Indicator Cluster Surveys (MICS) and Innovations in Household Surveys:

### Speaker: Mr. Saoud Al-Shammari, National Planning Council

Mr. Saoud Al-Shammari works at the National Planning Council as Assistant Director of the Censuses, Surveys and Statistical Methods Department. Mr. Saoud holds an MBA degree from Berlin Institute, a Master of Public Administration degree from Doha Institute for Graduate Studies and a Bachelor of Statistics degree from Qatar University.

#### Summary of the 1st Presentation:

Mr. Saoud Al-Shammari led and presented Qatar's experience with the MICS, conducted in Q3 2023 by the National Planning Council. The survey's primary focus was on gathering vital data to inform sustainable development goals (SDGs), especially in family, health, and education.

The session presented a history of MICS which was developed by UNICEF in the 1990s. The survey tracks health and education indicators related to children and women. The 2023 survey builds on a similar one conducted in 2012, aiming to provide accurate data for policy and decision-making. It also described the methodology of the survey that included 17,000 interviews across 6,000 households (Qatari and non-Qatari) using a sample based on the 2020 census. It employed a multi-stage selection method, face-to-face interviews with tablets (CAPI), achieving high response rates.

Furthermore, the session detailed the questionnaires which covered children's behavior, functional abilities, learning skills, and health, aligning with national and global SDG indicators. The process incorporated existing records, health data linkage, and response verification via a call center, showcasing an innovative approach. In addition, the session tackled the training and data quality assurance in which field teams were trained in interview techniques to ensure data quality. Data analysis was conducted using SPSS, including error identification and cross-checking.

The presentation announced that the preliminary results were shared with relevant ministries, such as Health and Education and a final report is due in November. As well, plans are underway to integrate findings into strategies and to invite further research by stakeholders. Mr. Saoud added that an updated version of MICS-7 iteration will aim for greater efficiency by using existing records and reducing the need for direct interaction. This should be very helpful in improving data quality and reducing respondent efforts.

**Recommendations:** the most prominent recommendations are to enhance the process of linking field work results to official records to improve the official statistics process in the State of Qatar.

## 2nd Presentation: The Role of Qatar Development Fund in Supporting SDGs in Least Developed Countries:

### Speaker: Sheikha Haya Abdulrahman Al-Thani, Qatar Fund for Development (QFFD)

Sheikha Haya Abdulrahman Al-Thani currently works at Qatar Development Fund as a Strategic Partnerships Director. Furthermore, Sheikha Haya holds another position at the Qatar Ministry of Defense as a Head of International Cooperation Department. Shaikha Haya holds a MA degree in Geopolitics, Territory and Security from King's College London, United Kingdom and a BA degree in International Politics and a Certificate in Arab and Regional Studies from Georgetown University, Qatar.

### Summary of the 2nd Presentation:

The presentation highlighted the global efforts of Qatar Fund for Development as an extension of the State of Qatar's leading role in supporting sustainable development around the world, especially in the least developed countries> These efforts promote stability and sustainable development worldwide.

Shaikha Haya emphasized the pivotal role of the National Planning and Statistics Authority (NPC in advancing data and official statistics for innovation and inclusivity, she stressed that accurate data is vital in policymaking, maximize value and achieving both national and international development objectives. Qatar's government, recognizing the role of data in the knowledge economy, prioritizes its use to enhance policy development and maximize returns on investment.

Shaikha Haya highlighted Qatar Fund for Development (QFFD) as an international initiative designed to address global challenges and promote universal freedoms, quality education, healthcare, self-determination, dignity, and security. QFFD aligns with Qatar's national vision and the UN's 2030 Sustainable Development Goals (SDGs), promoting cooperation among state institutions, humanitarian organizations, and global agencies to drive sustainable development and humanitarian aid. She emphasized the QFFD commitment to robust data and information ecosystems which are essential for monitoring and demonstrating progress. This is particularly essential in areas such as aid distribution and impact assessment, conforming to the international principles set by the OECD DAC.

Despite the challenges posed by the COVID-19 pandemic, which caused delays in projects and hindered progress toward SDG targets, the QFFD maintains a rigorous evaluation system that ensures project alignment with the SDGs, guiding its operations from partnership onboarding to follow-ups. In addition to the above, Qatar has also committed \$100 million to Gaza to aid the victims of the conflict. The QFFD's mission focuses on aiding developing countries and advancing the SDGs through comprehensive data collection, strong statistical systems, and informed policy development, aiming for a peaceful and secure world.

Recommendations: it is to support the quality of data provided by organizations concerned with assessing global humanitarian development needs, especially in the field of official data and the speed of the country's mechanisms to achieve effective response.

## 3rd Presentation: Official Statistics and Innovation: Pillars of Sustainable Development in the Gulf Cooperation Council (GCC) Countries:

### Speaker: Ms. Taiba Mohamed Abdul Rahman, GCC Statistical Center

Ms. Taiba Mohamed Abdul Rahman Works as a Project Manager at the GCC Statistical Center. She holds a Master's degree in Statistics from Sheffield University in the United Kingdom and a Bachelor's degree in Statistics from Sultan Qaboos University in the Sultanate of Oman.

#### Summary of 3rd Presentation:

The presentation asserted the importance of official statistics in supporting innovation and sustainable development across the GCC countries. It covered the following main points:

- 1. The presentation discussed the current state of official statistics and innovation in the GCC countries, highlighting the challenges faced by official statistics and how to leverage innovation to improve data collection and analysis using big data techniques and artificial intelligence. Despite challenges such as, data security and confidentiality issues associated with implementing innovative technologies, there are significant opportunities for national statistical systems and the Gulf organization to enhance regional and international collaboration and benefit from the experiences of other countries. Furthermore, the presentation underscores the importance of integrating innovation with official statistics as fundamental pillars for achieving sustainable development in the GCC, which will contribute to supporting decision-making processes and shaping effective policies and strategies.
- 2. Recommendations were as follows:
  - Enhancing investment in information technology and innovation to improve sustainable development data in the GCC countries, along with developing human resources and establishing clear policies to address the challenges and risks associated with changes in data sources, will contribute to supporting sustainable development in the Gulf organization. The availability of advanced technologies, adequate official statistics, qualified personnel, and effective policies should significantly support sustainable development in the region.
  - A call for action and cooperation between countries and institutions to achieve the Sustainable Development Goals through innovation in data collection and analysis.

## 4th Presentation: Mainstreaming Child Rights in Strategic Planning for Official Statistics:

### Speaker: Dr. Robert Bain, United Nations Children's Fund (UNICEF)

Dr. Robert is a data and research specialist with UNICEF's Middle East and North Africa Regional Office and regional coordinator of UNICEF's flagship household survey programme - Multiple Indicator Cluster Surveys (MICS). Dr. Bain holds a PhD in Engineering from the University of Cambridge in the United Kingdom.

### Summary of 4th Presentation:

The presentation explored national strategies for advancing child-sensitive statistical systems, emphasizing the use of the UNICEF and Paris21 toolkit developed for statistical system planners and stakeholders. It identifies opportunities to strengthen monitoring of child rights, including addressing child-related SDG data gaps, ensuring effective uptake and use of data, and protecting children from data misuse. Key considerations include the importance of age-disaggregated data, child-specific indicators and data protection and ethics. The session also considered the intersection of children's statistical data with other important dimensions such as disability and gender, as well as the participation of children in data collection processes, children's statistical literacy and engagement of children in decision-making.

**Recommendations:** it is to enhance the development of statistical skills to develop statistical skills for children by enhancing children's participation in the data collection process.

#### Session Discussion:

- 1. Ms. Karina Nersesyan, representative of the United Nations Population Fund, who attended with the Moldova delegation, asked a question about how data and data governance fit into the big picture, especially when it comes to working with partners to accelerate the social impact of the Fund's work.
- Sheikha Haya Abdul Rahman Al Thani answered that the cost of projects can range from tens of thousands to tens of millions. The implementation period may vary from a few months to several years, depending on the nature of the project. It is worth noting that the Sustainable Development Goals form the basis of our alignment with partnerships. Therefore, the first step we take as a partnership or partner management is to verify the project's compatibility with the sustainable development goals, as these goals constitute the spirit of our operations at the Qatar Fund for Development and are a basic condition for any partnership or project.
- 2. Dr. Khaled Al-Mansi Al-Jubouri from the Ministry of Endowments and Islamic Affairs in the State of Qatar asked a question about what is new in the Marsa platform, starting with statistics, passing through the data collection stage, and ending with the information panel, so that we can benefit from your experience in providing statistical data that keeps pace with sustainable development and enables us to take action and continuing decisions.

Ms. Taiba bint Muhammad Abdul Rahman answered that before the center began developing this system and obtaining the approval and support of the national statistical centers for it, we conducted a feasibility study with specific requirements. The system can link with the six national statistical centers in the Gulf countries. It can link and read data and files in any form and format, whether in SDMX format and in Excel, or in any national statistical format. The Marsa platform can adapt to any data format. After reading the data, the data is processed automatically without human intervention. Priority is given to publishing the data and incorporating the publishing schedule in the Marsa system without any human intervention. The Marsa platform can publish the center's statistical data since it is based on SDMX standards.



### **6th Session:**

### **Data Literacy and Sustainable Development:**

#### Moderator: Ms. Dana Ahmad Al Salem

National Planning Council

## 1st Presentation: Leveraging Data-driven Transformation for Resilient and Smart Cities:

#### Speaker: Dr. Ammaar Mohammed Hamadien, United Nations Development Programme (UNDP)

Dr. Ammar Hamadien is an international ICT expert with 28 years of experience in leadership roles across government agencies, multilateral organizations, and multilateral telecom companies. He is currently the Lead Advisor for Digital Sustainable Development (D4SD) at the UNDP Regional Bureau for Arab States.

#### Summary of 1st Presentation:

- By 2050, an estimated 68% of the global population will reside in urban areas, intensifying pressure on infrastructure, housing, and services, particularly in new megacities.
- Data-driven urban planning can optimize the management of infrastructure and urban resources.
- Predictive energy efficiency models enable cities to prepare for future expansion while minimizing environmental impact.

- Inclusion and equity is maximized by to the use of the Internet of Things (IoT) and big data, which improve accessibility and resilience for all communities.
- Public engagement is fostered through open data platforms, encouraging citizen participation in governance.
- Supporting SDGs 11, 10, 7, 13.
- UNDP Contributions: Smart governance, sustainable and resilient infrastructure, inclusive innovation foster collaboration in supporting equitable urban growth.
- Strengthening cyber security with robust, multi-layered protocols that protect sensitive data.
- Fostering collaboration to build smart and resilient cities capable of adapting to future challenges.

### 2nd Presentation: Academia Network for SDGs:

## Speaker: Dr. Anasse Bouhlal, United Nations Educational, Scientific and Cultural Organization (UNESCO)

Dr. Anasse Bouhlal is a Regional Specialist in the Higher Education and Technical Vocational Training Programme, UNESCO Regional Office for the Gulf States and Yemen. He holds a PhD in Technical Sciences and speaks Arabic, French, Finnish, English and Russian. Over the past thirty years, Dr. Bouhlal has worked in the fields of education, vocational training, and higher education in Finland and other European Union countries. He has closely collaborated with ministries of higher education across the entire Arab region.

### Summary of 2nd Presentation:

The role of Saudi universities in the SDGs is to support objectives such as education, economic development, and environmental protection through research initiatives and educational programs that contribute to enhancing the Kingdom's global role in sustainable development.

The SDG Academic Network supports the establishment of a national dashboard to track research activities and progress in achieving the SDGs.

Stimulating research collaboration by encouraging researchers from Saudi universities to work together and with international institutions to achieve greater impact.

Enhancing cooperation between students locally and internationally on research projects that serve development goals.

Supporting universities to create innovation hubs that integrate SDGs into curricula and inspire creativity.

Enhance engagement through a national volunteering platform, the National Schools Program for SDGs, and national performance measurement tools to accelerate the achievement of the SDGs.

The academic network supports Vision 2030 by strengthening partnerships and providing a national platform to identify research gaps, contributing to improving the Kingdom's performance in global competitiveness and achieving comprehensive development goals.

### 3rd Presentation: Reconstructing Development Metrics: Embracing Diverse Cultural Realities Beyond the Global North:

#### Speaker: Dr. Eddy Borges-Rey, Northwestern University in Qatar

Dr. Eddy Borges-Rey is an Associate Professor at Northwestern University in Qatar. His academic expertise lies in digital journalism and emerging media. His research explores the interplay between media, technology, and power, focusing particularly on issues in data journalism, critical data studies, code and algorithm studies, artificial intelligence and automation, mobile journalism, photojournalism, and data and media literacy.

#### Summary of 3rd Presentation:

- Revisiting the prevailing global development metrics, often based on Western models.
- There are some cultural challenges, as Western-centric standards which lack inclusiveness, focusing on individualism and market growth, and ignoring the informal economies that make up a significant part of the workforce in countries like Egypt and Morocco.
- Indicators such as the Global Competitiveness Index do not adequately reflect environmental and social factors
- Some regions offer alternatives to traditional metrics, such as the adoption of the concept of "decent living" in some South American countries, which recognizes natural rights and focuses on the well-being of society rather than economic growth.
- The presentation recommends adopting customized development frameworks that are in line with local realities, promoting the involvement of communities in policy formulation, and fostering collaboration with local researchers.



### 7th Session :

### **Population and Sustainable Development:**

Mr. Saoud Al-Shammari

National Planning Council

### 1st Presentation: Data Management Within Government – Best Practices, Priorities and AI Readiness:

### Speaker: Ms. Navneet Makhni, PricewaterhouseCoopers (PwC)

Ms. Navneet is a leader in Data Governance and Analytics with over 16 years of global experience. She specializes in large-scale data programs and national data governance. Her expertise drives data-driven decision-making and improved public services.

### Summary of 1st Presentation:

This session emphasized the critical role of data management in government decision-making and its integration with advanced analytics and AI. Despite its revolutionary potential, progress has been slow due to significant challenges. Key points and discussion topics are summarized below.

#### Role of Data Management:

- It is the backbone of all governmental decisions and policymaking.
- A critical gap exists in recognizing its importance and aligning it with AI strategies.

- Challenges in Al Adoption:
  - Data Quality: Poor quality and limited access hinder progress.
  - Expertise Gaps: Shortage of skilled professionals in AI and analytics.
  - High Costs: Implementation remains prohibitive for many organizations.
  - Lack of Strategy: Misaligned initiatives often fail to deliver tangible benefits.

#### • Emerging Trends:

- Modern data governance frameworks.
- Rise of open data sources for public policymaking.
- Integration of generative AI, like ChatGPT, with significant potential for combining statistical methods with AI.
- Government Initiatives:
  - National data strategies to enhance maturity and value through insights, sharing, and analytics.
- Qatar adheres to the PEARL Principles for Data Management:
  - Protected: Secure data assets.
  - Enhanced: Improve quality and utility.
  - Accessible: Facilitate data sharing.
  - Responsible: Ethical use and AI governance.
  - Leveraged: Maximize value.
- Modern Data Management Supported by AI Readiness:
  - Define AI readiness nationwide to future-proof government services through policymaking and driving insights and foresights.
  - Pilot high-impact use cases to address real business problems and mitigate bias.
  - Engage the private sector and academia to support Al integration.

The speaker concluded that the vision is for a government truly driven by AI, where data and AI work hand in hand to improve citizen experiences, services, and outcomes.

## 2nd Presentation: Gender Data for Sustainable Development: Leaving no one behind::

### Speaker: Ms. Iris Sawalha, United Nations for Women (UNWomen)

Ms. Iris Sawalha is the Regional Chief of the Data and Results Unit at the UN Women Regional Office for the Arab States and oversaw the development and implementation of multiple data systems. She has established a regional center of excellence in gender equality and women's empowerment and developed two platforms to promote gender statistics.

### Summary of 2nd Presentation:

Ms. Iris noted that gender equality has been a strategic priority since the Beijing Platform for Action (1995) and the adoption of the Sustainable Development Goals (SDGs) in 2015. Achieving sustainable development and SDG slogan "No one is left behind" requires evidence-based planning and the provision of the necessary statistics and data. As women face by multi-dimensional social, economic, and environmental challenges around the world that hinder their advancement, and exacerbate gender disparities, asserting the importance of gender-based statistics to eliminate the gender gap and achieve the fifth goal of the SDS 2030 on gender equality.

Noting the crucial role of gender data in planning stages, Ms. Iris identified six main objectives of gender statistics, emphasizing their importance in monitoring progress and assisting decision makers in bridging gender gaps, and monitoring progress in education, health, and economic opportunities in line with the development goals, international conventions and the Beijing Platform for Action 1995. In addition, gender statistics provide accurate information on the status of women in global reports and development policies and programs and address the vital needs of women in different development sectors. Such data enable tailored interventions and timely response to crises, highlighting the harm and challenges faced by women.

Ms. Iris noted that Arab countries face multiple data challenges, in gender statistics availability and accuracy, despite the large gender gaps in access to resources and services, labor force participation and political representation, as well as the marginalization and humiliation of women in conflict areas. However, some Arab countries with strong legislative frameworks, institutional support, and budgeting for gender data projects, are making tangible and continuous progress in the production, dissemination and use of gender data and promoting its use across sectors. She noted that the Arab world has the lowest rate in women's political participation, rising to only 18.2 in 2017 from 3.3 in 1997> Women's labor force participation in the Arab World also remains below 26%, compared to the global average of 48%. This places the Arab World at the bottom of the global gender equality index.

On the other hand, the participants highlighted that the statistics of many Arab countries exclude women working in parallel (informal) economies, representing the largest work force proportion in countries such as Egypt (65%) and Sudan.

The speaker then referred to the advancements in the information technology and the potential benefits of artificial intelligence in enhancing the efficiency of data collection and providing accurate and timely data to support decision-making and rapid response. Noting that Data collection tools and methods such as (Gentrack) help improve data collection, she cautioned against risks such as Gender biases in artificial intelligence systems which can lead to biased algorithms, if not designed to address gender disparities.

The session concluded with three recommendations:

- 1. Governments and partners should close gaps in gender data and integrate gender considerations into national policies and strategies.
- 2. Develop the design and uses of artificial intelligence in a gender-sensitive manner.
- 3. Greater attention should be given to the integration and accounting of women working in informal economies.

### 3rd Presentation: Harnessing Data for Public Health Decision-making: Process Challenges and Innovations:

### Speaker: Dr. Henry Victor, World Health Organization (WHO)

Prior to joining WHO, Dr. Henry Victor served as a researcher and expert at the United Nations Office on Drugs and Crime in Nigeria, where he led the establishment of the Mahesh Health and Demographic Surveillance System, and the implementation of large-scale surveys to assess the prevalence of drug use in Nigeria. He currently serves as a coordinator for the Health Information Systems at the World Health Organization (WHO) Regional Office in Cairo. He holds a master's degree and a doctorate from UBN.

### Summary of 3rd Presentation:

presentation reviews the importance of data, and the latest strategies to enhance national health information systems (NHIS). to examine the progress on the SDGs, He emphasizes the importance of electronic medical records in all matters related to human health and safety, and in monitoring the progress of the 2030 sustainable development goals. that requires strong national health information systems. WHO regional office contributes by providing technical support to the countries to develop the needed policies and practices to manage data collection, statistical reports, and data analysis, paving the way for automation of medical records. To enhance the use of technical data.

WHO has established many initiatives to enhance the using of data including: The Global Health Data Center, the World Health Organization for Needs and Epidemiology Intelligence, and global and regional digital health strategies. In addition to some of the tools used such as the World Health Statistics Report, the World Health Assessments, the Global Universal Health Coverage Monitoring Report, the International Classification of Diseases, and geographic information systems, in addition to its permanent work to strengthen partnerships with countries and institutions, in addition to the establishment of the network regional institutions concerned with evidence and data for policies in 2020.

Despite the tremendous technological progress that facilitates the process of collecting, preserving, and analyzing data, the current situation in the Middle East revealed the large gap in the provision of data, which hinder the measurement of the progress in reaching the goals and indicators of the Sustainable Development Goals 2030.

Regardless of the importance of data for health and saving lives, the gap in indicators was significant in vital parameters such as those related to causes of death and the availability of essential and life-saving medicines. Reporting slow progress at regional level on health-related SDG indicators that hindered measuring the progress in achieving the third target in the Middle East. WHO seeks to facilitate assessment and measurement at the planning and implementation stages, and monitor the progress of countries within the scope of the Middle East Regional Office.

Based on his assessments for 11 countries in the Arab world, the data reveal the existing challenges, as only two countries use electronic medical records, and 10 countries have insufficiently defined data structure and standards, while 5 countries need to enhance data visualization mechanisms and enhance data analysis, and 7 countries use legacy or national systems.

As part of WHO's efforts to strengthen the operating systems, they recommend other solution such as using local & regional indicators alongside the indicators of the SDG 2030, by studying national strategies and designate how to use data, focusing on national plans, measuring local capacities and ways to go forward.

#### Session Discussion:

The discussion revolved around how to start an AI integration roadmap, and the solution was explored by identifying high-impact use cases to start AI integration, addressing data biases through pilot projects, and combining small pilot projects with a comprehensive strategy to build an effective AI roadmap.



### **8th Session**

### **Data Innovation for Sustainable Development:**

### Moderator: Mr. Salah Al Saleh

United Nations Population Fund (UNFPA)

### 1st Presentation: Advancing Moldova's Data Ecosystem: Digital Transition, EU Harmonization and Administrative Data Integration – Digitization of Moldova's Statistical System for a Modern Data Ecosystem:

### Speaker: Dr. Oleg Cara, National Bureau of Statistics in the Republic of Moldova

Dr. Oleg Cara is the Director General of the National Bureau of Statistics of the Republic of Moldova.

He is a holder of a PhD in Economics' degree and has a long experience in the field of official and academic statistics. He has worked over 20 years in the National Bureau of Statistics (NBS) of Moldova, as well as in the National Institute for Economic Research. Oleg has also been involved in training the new generation of statisticians, providing lectures to the students of the Academy of Economic Studies of Moldova for more than 10 years. Dr. Cara has also acquired vast international experience. He worked in the UN FAO Statistics Division for over 5 years. He is an elected member of the International Statistical Institute, reflecting his professional commitment and contributions to the statistical field at the local and international levels.

### Summary of 1st Presentation:

Dr. Oleg Cara's presentation on the digital transformation of national data highlighted the major success factors and the challenges encountered during the transition to modern technologies and software. These included the research on alignment with EU requirements, integration of administrative data, advances

in data collection and management. Furthermore, it discusses improvements made to legal systems to support the transformation, exchange, and transfer of administrative data, as well as the digitization of infrastructure and secure storage of personal data.

The presentation also highlighted the lessons learned of the 2024 Census, including cooperation with national government institutions to ensure data security and privacy. The digital transformation has enabled the National Bureau of Statistics to successfully implement the 2024 Population and Housing Census and benefit from GIS technologies, electronic data collection, and the integration of diverse administrative data sources from the public and private sectors.

### 2nd Presentation: Strengthening Population Data Analytics and Visualization: Insights from UNFPA's Population Data Portal:

### Speaker: Dr. Willis Odek, United Nations Population Fund (UNFPA)

Dr. Willis Odek has over two decades of experience in research, monitoring, and evaluation in the field of population, health, and development, including technical areas of family planning, key populations' interventions, malaria, nutrition, employment interventions, and population and health data systems. He is currently a Population and Development Advisor at UNFPA Arab States Regional Office, providing strategic technical, programmatic, and thought leadership in population-related data generation, analysis and dissemination. Dr. Willis holds an MSc in Demography and Health from the London School of Hygiene and Tropical Medicine, UK, and a PhD in Sociology from the University of Aberdeen, Scotland, UK.

### Summary of 2nd Presentation:

To facilitate monitoring the goals of the United Nations Population and Development (UNFPA), UNFPA developed a population data portal with more than 200 indicators on topics such as sexual and reproductive health, population, and development. The portal consolidates the latest data from UN agencies and other sources into a single database with indicators clustered within eight broad categories: (1) Education; (2) Family planning; (3) Inequality; (4) Sexual and reproductive health; (5) Gender equality; (6) Population. (7) Labor; and (8) Statistical capacity.

The Population Data Portal also features high-definition maps that overlay population and development indicators and infrastructure details (for example, roads, schools, and health facilities), taking advantage of the increasing availability of census data and geographically referenced surveys. By using geographic information systems (GIS) analytical features, users can analyze data across various geographic levels, such as country, province, and district. These multi-layered maps allow for the use of several indicators from different data sets at a time.

### 3rd Presentation: Moldova's Path to Digital Transformation and Al: Strategic Vision and Regulatory Developments: Advancing Digital Moldova for Efficient Governance and Informed Decision-making Process:

#### Speaker: Mr. Artiom Cociu, Prime Minister Office in the Republic of Moldova

Mr. Artiom Ciociu is the Head of Prime Minister's Delivery Unit, covering digitalization and data-driven governance areas, which forms one of the core pillars of his team's portfolio. Mr. Artiom has 15 years of experience in operations' research and in coordination with several data-driven Software as Service platforms. In recent years, he has served as the Prime Minister's advisor, strengthening the government's capacity on project delivery, digitalization, and efficient governance.

#### Summary of 3rd Presentation:

Mr. Artiom Ciociu's presentation on Moldova's path to digital transformation and AI clarified the country's strategic vision and regulatory advancements in this domain He highlighted Moldova's strategic objectives of leveraging digital transformation and AI technologies to drive economic development and align with EU standards

Additionally, Mr. Ciociu outlined the government's priorities and the legal framework that underpin digital transformation and AI initiatives in the public sector. This includes the preparation of a white paper on artificial intelligence and data management, which offers a strategic roadmap for building a robust national ecosystem for AI and data management, while guiding future policy development in line with EU standards.

Furthermore, the presentation highlighted the progress made by Moldova in strengthening data governance, addressing critical issues such as data security and privacy, and emphasizing the critical importance of data sovereignty in the context of evolving international standards.

### **4th Presentation: Population Estimates and Projections:**

**Speaker: Dr. Sara Hertog, United Nations Department of Economic and Social Affairs (UNDESA)** Dr. Sarah Hertog is a Population Affairs Officer at the United Nations Department of Economic and Social Affairs. For 17 years, she has been working on the analysis of demographic trends in the context of the internationally agreed development goals, including the Sustainable Development Goals. She works as part of a team of demographers and statisticians to produce the United Nations World Population Prospects. Her primary responsibility involves estimating and projecting population size and demographic trends for the West and South Asian regions. Dr. Hertog holds a PhD in Demography and a Master's degree in Population Health Sciences from the University of Wisconsin.

### Summary of 4th Presentation:

Population estimates and projections provide a critical framework for national policy planning and guidance, particularly in developing population policies. The annual series of total fertility, life expectancy at birth, and total net international migration are developed through probabilistic models. The models account for historical levels and trends in each country to create a central pathway for predictions, as well as statistical uncertainty bounds such as forecast intervals or performance indicators.

The quality of population estimates and projections depends on the availability of reliable and timely demographic data. The UN Population Division's projections take into consideration the fullest range of demographic evidence available to date, including data from historic censuses as well as information on births and deaths from civil registration and vital statistics systems for 169 countries and demographic indicators from 3,189 surveys.

For the projection period from 2024 to 2100, emphasis was placed on reliable data supported by normative considerations reflected in population censuses (every ten years) and the results of surveys based on representative population samples, such as household surveys (if any). This data is utilized in the preparation of the United Nations Population Division's report on World Demographic Prospects: Methodology for the Population Estimates and Projections issued in 2024. To accounts for uncertainty, the projections included several alternative scenarios, which deviate from baseline projections.

These projections employ matrix-based methods to calculate hypothetical data align with estimated historical trends in fertility, mortality, and net international migration. The future population projection for each country from 1 January 2024 to 2100 incorporate various assumptions made regarding future trends in fertility, mortality, and international migration.

Probabilistic methods are to estimate trajectories for key components, including fertility rates, and Life expectancy at birth (for both males and females), and net migration rates and numbers. Additionally, different scenarios have been developed based on these assumptions. For example, with regard to fertility: (1) the medium fertility scenario; (2) the high fertility scenario; (3) the low fertility scenario; and (4) the constant fertility scenario.

The scenario for medium fertility was adopted based on the theory of demographic transition. Overall, there is a consensus that the historical evolution of fertility includes three broad phases: (i) a high fertility, pre-transition phase (phase I), (ii) a fertility transition phase (phase II), and (iii) a low-fertility, post-transition phase (phase III).



# 9th Session: Discussion and Adoption of the Doha Declaration for Innovation in Sustainable Development:

#### Moderator: Mr. Saoud Al-Shammari

National Planning Council

We, the representatives of ministries, government institutions, UN agencies, international organizations, national statistics offices, civil society, academia, and the private sector, convened in Doha on 22-23 October 2024. We recognize the growing complexity of interconnected global challenges such as climate change, poverty, inequality, preserve peace and security, environmental degradation, and conflict. These challenges necessitate innovative, data-driven solutions leveraging modern technologies, including statistics, data analytics, artificial intelligence (AI), including machine learning (ML).

In alignment with Qatar National Vision 2030, the 3rd National Development Strategy (NDS3), and the United Nations Sustainable Development Goals (SDGs) for 2030, and the UN Global Digital Compact, we affirm the central role of data in addressing sustainability challenges, fostering innovation, and informing evidence-based policies.

Statistics and Data for Innovation in Sustainable Development are closely linked to human rights, as outlined in the SDGs. They are inherently tied to promoting and protecting human rights. Using statistics and data plays a vital role in realizing these goals by providing measurable insights, fostering accountability, and driving innovation in policymaking. Statistics and data allow governments, organizations, and civil society to monitor human rights conditions and evaluate progress toward achieving human rights goals.

### **Declaration:**

#### 1. Harnessing the Power of Data for Sustainable Development:

We reaffirm the indispensable role of data, statistics, AI, and ML in fostering innovation and addressing critical global challenges. These tools enable us to analyze trends, predict future outcomes, optimize resource allocation, inform real-time decision-making, human development interventions, crisis preparedness, reconstruction and recovery, thereby accelerating progress toward sustainable development. In a rapidly advancing AI industry, the risks of gender biases in AI and machine learning systems, existing inequalities can be profoundly perpetuated for years to come if not addressed properly.

### 2. Commitment to Fostering Data Innovation:

We are committed to cultivating a culture of data innovation by advancing of the development, deployment, and sustainable use of advanced technologies. Achieving this goal requires strategic investments, funding mechanisms, and capacity-building efforts are critical to achieving this goal. To this end, we will foster partnerships and collaborations to create an enabling environment for continuous exchange of ideas, methodologies, and best practices. Support in investing AI digital infrastructure to support data innovation.

### 3. Collaborative Efforts for responsible, equitable and interoperable data cooperation and governance:

We emphasize the critical importance of cross-sectoral and interdisciplinary collaboration to build inclusive, equitable data ecosystems that actively address gender disparities. It is essential that all stakeholders, including government entities, academia, private sector, civil society organizations and non-governmental organizations, and regional and international organizations to work together to ensure that the benefits of data are accessible to all ,Collective efforts should also focus on prevent the perpetuation of biases in data driven technologies, ensuring that no one is left behind.

### 4. Promoting Ethical Data Use:

We emphasize the importance of preventing algorithmic and gender biases and promoting algorithmic transparency in AI including ML applications. Data-driven technologies must be developed and used in ways that are fair, unbiased, and benefit all communities. To achieve, it is essential to strengthen legal frameworks and governance mechanisms to uphold ethical standards, protect privacy, ensure accountability and enforce liability where harm occurs.

### 5. Building Capacity and digital solutions for Data-Driven Innovation:

We pledge to invest in capacity-building initiatives to empower stakeholders with the knowledge, skills, and solutions necessary to harness data for sustainable development. Training programs, workshops, and webinars will focus on the practical applications of data analytics, AI, including ML, enabling stakeholders to drive innovation and make informed decisions.

### 6. Fostering Knowledge Exchange and Best Practices:

The Doha Data Forum provides a platform for sharing best practices, showcasing successful data-driven initiatives, and promoting knowledge exchange across regions. Case studies demonstrating positive impacts on sustainable development, such as those related to environmental protection, economic inclusivity, gender and social equality, will inspire future progress.

### 7. Reaffirming Global Commitments:

We reaffirm our unwavering commitment to the principles and objectives established in previous UN World Data Forums, including the Cape Town Global Action Plan for Sustainable Development Data (2017), the Dubai Declaration (2018), the Bern Data Compact for the Decade of Action on the SDGs (2021), and the Hangzhou Declaration (2023). These foundational agreements continue to guide our vision for strengthening data ecosystems and driving data innovation toward achieving the SDGs.

However, we acknowledge that emerging challenges may require us to adapt these frameworks to ensure they remain effective for new challenges in today's complex global landscape.

#### 8. The Potential and Role of Academia in Advancing the SDGs

Recognizing the central role of academia in legitimating, advancing and incubating of the 2030 Agenda, it is clear that the universities are uniquely placed to lead the cross-sectoral implementation of the SDGs. They serve as an invaluable source of expertise in research and education on all sectors of the SDGs, offering evidence-based solutions and developing critical and cutting-edge knowledge through research and innovation.

To ensure real progress toward achieving the SDGs, it is essential to strengthen and revitalize academic institutions, particularly universities, as they play a leading role in cross-sectoral implementation efforts. By developing multi-faceted capacities for generating ever-evolving streams of knowledge, universities can continue to lead the road in research, education and innovation in support of sustainable development.

#### 9. Commitment to the Summit of the Future:

In light of the Pact for the Future adopted during the Summit of the Future in New York in September 2024, we reaffirm our commitment to strengthening digital cooperation and harnessing of science, technology, and innovation for the benefit of all humanity. We pledge to accelerate the use of digital technologies to advance the 2030 Agenda, including facilitating technology transfer on mutually agreed terms to bridge the digital and innovation divide. Furthermore, we resolve to implement our shared commitments toward an open, free, secure, inclusive, and human-centered digital future.

#### 10. Addressing Synthetic Data Challenges:

We recognize the rise of synthetic data generated by modern AI systems, which can closely mimic human-generated data but carry risks of misuse for malicious purposes. Recognizing these challenges, we stress the urgent need for a global framework to regulate and manage synthetic data to ensure its responsible and ethical use.

### 11. Call to Action:

• Investing in Data Infrastructure and Emerging Technologies: We call upon ministries, universities, research centers, non-governmental organizations, and the private sector to invest in data infrastructure and emerging technologies. Data accessibility, open data standards, and real-time data dissemination must become integral components of national development strategies.

- Fostering Interdisciplinary Collaboration: We urge stakeholders to build cross-sector platforms that enable ongoing collaboration among data scientists, policymakers, and experts in areas such as the environment, public health, and social policy. These partnerships will help co-create data-driven solutions for sustainable development and bridge gaps between knowledge, policy, and practice.
- Ensure Data Equity and Inclusivity: We advocate for inclusive data practices that ensure equitable access to data resources for all users, in line with the Fundamental Principles of Official Statistics adopted by the United Nations Economic and Social Council (ECOSOC). We affirm the critical importance of sex-disaggregated data for advancing and tracking progress on gender equality, a strategic priority sine the Beijing Platform for Action and the Sustainable Development Goals.

Data disaggregation is vital for addressing inequalities and making progress on SDGs, particularly in the areas of health, education, gender equality and vulnerable populations, such as women, children, migrants and economic opportunity. Special emphasis should be given to marginalized groups, such as women, indigenous populations and refugees, who are often underrepresented in official statistics, which leads to a lack of visibility in data and neglect of the needs and rights of these groups.

Addressing these data gaps is essential to ensure that the perspectives and rights of all individuals are taken into consideration in development endeavors. We call on national stakeholders to prioritize gender data production, leveraging technology and innovation to close gaps in gender data production and capacity, and accelerate the achievement of the SDGs.

- Advance Policy Frameworks for Data-Driven Governance and Stewardship:We encourage
  national stakeholders to adopt forward-looking policy frameworks that prioritize evidence-based
  decision-making. By integrating data-driven insights into national strategies, policies can become
  more resilient and impactful in advancing sustainable development goals.
- Supporting Innovation in Low-Resource Settings: We call for increased investment in designing, testing, and adopting innovative technologies in low-resource settings to maximize their impact on sustainable development.



### Participant's Opinions in the Doha Data Forum 2024:

At the end of the second day of the Doha Data Forum, a questionnaire form to evaluate the work and content of the forum was distributed to the participating attendees. 66 of the attendees responded to the form, and the results were as follows:



As shown in the graph above, 92.4% of the forum participants who completed the evaluation form expressed their high satisfaction with the content of the forum. The high satisfaction rate indicates that the forum met the expectations and needs of the participants and asserts the importance of the content and topics addressed and discussed by the forum.



As shown in the graph above, 84.8% of Doha Data Forum participants who completed the evaluation form found the content of the forum appropriate and very useful for their jobs. This high rate of satisfaction asserts the success of the forum in meeting professional requirements and providing useful resources for innovation in sustainable development.



#### Evaluate the content of the Doha Data Forum sessions according to your level of satisfaction:

The graph above illustrates the overall distribution of satisfaction levels for each session of the Second Doha Data Forum. The data shows that the majority of attending participants were highly satisfied with the topics covered and found the content presented by the Doha Data Forum highly beneficial. Notably, the first session received the highest rate of satisfaction.

#### Topics that participants would like to be addressed in the third Doha Data Forum:

- Focus on building capacity and enhancing data knowledge among individuals and organizations, in addition to enhancing international cooperation to support global strategies in data management.
- Discussing the best foundations and approaches for collecting data in light of digital transformation.
- Innovation in data collection and analysis.
- Data visualization, data dissemination and data transfer.
- Data science in medicine and data analysis.
- How to use and apply artificial intelligence in the field of data and statistics.
- Smart cities.
- Adapting big data for sustainable development.
- The impact of digital development on social and economic empowerment.
- Social statistics and international standards address gaps and challenges.
- Establishing a unified national database.
- Presenting the experiences of researchers in the field of disseminating data and communicating it to users.
- Applications and software for processing data using artificial intelligence.
- Data quality, management, and artificial intelligence.

#### Participants suggestions regarding the sessions or overall agenda:

- 1. Better management of session timing and adherence to session dates.
- 2. Improve seating and overall logistics.
- 3. Increase the time for each session to allow time for discussion.
- 4. Workshops alongside forum sessions.
- 5. Sessions to be in Arabic.

#### Future steps and actions:

- 1. Building an interactive forum website, including presentations and deliberations.
- 2. Preparing a comprehensive report on the forum.
- 3. Consultation on translating the Doha Declaration into action programs.

### **Conclusion:**

The Doha Data Forum for Innovation in Sustainable Development aims to be a platform for driving progress towards a more sustainable and equitable future. Leveraging the power of data and analytics should be very helpful in opening new opportunities, addressing critical challenges and building a better world for the current and future generations.

A brief survey will be conducted during the forum to gather feedback on the session. This feedback will be invaluable in shaping future events and initiatives. Based on the insights from this survey, post-event webinars will be hosted to delve deeper into specific topics and address participants' inquiries. This should be very helpful in maximizing the knowledge gained from the Doha Data Forum and empowering all stakeholders to harness the potential of data for a more sustainable tomorrow.

The Second Doha Data Forum marks the beginning of a new era of data-driven innovation for sustainable development. We, the participants, commit ourselves to utilizing the power of data, statistics, AI, and ML to address global challenges and drive meaningful progress toward a sustainable, equitable, and resilient future. Through collective action, knowledge sharing, and ethical data practices, we pledge to translate the insights gained from this forum into concrete actions that will foster innovation and sustainable development for the future generations.

### **Annexes:**







### Under the patronage of

### H.E. Sheikh Mohammed bin Abdulrahman bin Jassim Al Thani

Prime Minister and Minister of Foreign Affairs



Agenda

Day 1: Tuesday, 22 October 2024

The Ned Doha Hotel

08:30 ◆ Registration 09:30 - 10:00 ◆ Welcome and Inauguration: H.E. Dr. Abdulaziz bin Nasser bin Mubarak Al Khalifa Secretary General of the National Planning Council (NPC) 10:00 - 10:30 ◆ Coffee Break and Networking

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10:30- 11:30 🔶	1 <sup>st</sup> Session: Sustainable Development and Artificial Intelligence (AI)
	<b>Moderator: Dr. Muhammad Imran</b> Qatar Computing Research Institute - Hamad Bin Khalifa University
•	Arabic Large Language Model
	<b>Dr. Mohamed Eltabakh</b> Qatar Computing Research Institute - Hamad Bin Khalifa University
•	Addressing Complex Risks for De-risking Development
	<b>Ms. Minako Manome</b> United Nations Development Programme (UNDP)
•	From Social Media to Action: Harnessing Geospatial Data and Artificial Intelligence (AI) for Smarter Disaster Management
	<b>Dr. Reem Suwaileh</b> Hamad Bin Khalifa University
•	Artificial Intelligence Applications for Social Good
	<b>Dr. Muhammad Imran</b> Qatar Computing Research Institute - Hamad Bin Khalifa University
•	Discussions
11:30 - 12:00 🔶	Coffee Break and Prayer Time
12:00- 13:00 🔶	2 <sup>nd</sup> Session: Data and Artificial Intelligence (AI)
	<b>Moderator: Mr. Nasser Saleh Al Mahdi</b> National Planning Council
•	Leveraging Reproducibility in Statistical System Production
	<b>Mr. Michael Cole</b> UK Office for National Statistics (ONS)
	Harnessing Artificial Intelligence (AI) and Machine Learning for Advancing Official Statistics: Turkish Statistical Institute (TurkStat) Experience:
	<b>Mr. Bilal Kurban</b> Turkish Statistical Institute (TurkStat)
	Bringing Data into the Era of Artificial Intelligence (AI)
	<b>Mr. Ahmad Debbas</b> Microsoft

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## Modernisation of NSOs in OIC Countries through Digitalisation, Machine Learning and Artificial Intelligence (AI)

#### Mr. Onur ÇAĞLAR

The Statistical, Economic and Social Research and Training Centre for Islamic Countries (SESRIC)

Discussions

### 13:00 - 13:45 • 3<sup>rd</sup> Session: Data Analysis for Sustainable Development

Moderator: Mr. Hafs Abu Mallouh National Planning Council

Advancing Data Governance and Integration: The Role of DOSM in Modernizing National Statistical Systems

**Dr. Mohammad Uzir** Department of Statistics Malaysia (DOSM)

Progress Towards Achieving the SDGs in IsDB Member Countries: Challenges and Opportunities

**Dr. Arif Oduncu** Islamic Development Bank (IsDB)

Using Open SDG to Create National Reporting Platforms for Sustainable Development Goals (SDG) Data

Ms. Sarah Phelps UK Office for National Statistics (ONS)

- Discussion and Closing Day 1
- Lunch and Networking

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#### Day 2: Wednesday, 23 October 2024

### 

**Moderator: Ms. Nada Al Mahmeed** Civil Service and Government Development Affairs

#### Top Trends in Data and Analytics 2024

**Mr. Ludovic Veale** Gartner

Data Governance

**Ms. Mari Ylä-Jarkko** Director General - Statistics Finland

 Bridging the Skills Gap: Mapping QNOC to ESCO for Sustainable Workforce Development in Qatar

Mr. Andrea Petrelli International Labour Organization (ILO)

#### Discussions

### 09:15 – 10:15 🖕 5<sup>th</sup> Session: Official Statistics and the Future of Sustainable Development

Moderator: Ms. Noora Al Rashdi National Planning Council

Qatar MICS and Innovations in Household Surveys

Mr. Saoud Al-Shammari National Planning Council

The Role of Qatar Development Fund in Supporting SDGs in Least Developed Countries

Sheikha Haya Abdulrahman Al-Thani Qatar Fund for Development (QFFD)

Official Statistics and Innovation: Pillars of Sustainable Development in the GCC Countries

**Ms. Taiba Mohamed Abdul Rahman** GCC Statistical Center

Mainstreaming Child Rights in Strategic Planning for Official Statistics

**Dr. Robert Bain** United Nations Children's Fund (UNICEF)

Discussions

10:15 - 11:00	•	6 <sup>th</sup> Session: Data Literacy and Sustainable Development
		<b>Moderator: Ms. Dana Al Salem</b> National Planning Council
	•	Leveraging Data-driven Transformation for Resilient and Smart Cities
		<b>Dr. Ammaar Mohammed Hamadien</b> United Nations Development Programme (UNDP)
	•	Academia Network for SDGs.
		<b>Dr. Anasse Bouhlal</b> United Nations Educational, Scientific and Cultural Organization (UNESCO)
	•	Reconstructing Development Metrics: Embracing Diverse Cultural Realities Beyond the Global North
		<b>Dr. Eddy Borges-Rey</b> Northwestern University in Qatar
	•	Discussions
11:00 - 12:00	•	7 <sup>th</sup> Session: Population and Sustainable Development
		Moderator: Ms. Saud Al Shammari National Planning Council
	•	Data Management Within Government – Best Practices, Priorities and AI Readiness
		<b>Ms. Navneet Makhni</b> PricewaterhouseCoopers (PwC)
	•	Gender Data for Sustainable Development: Leaving no one behind
		<b>Ms. Iris Sawalha</b> UN Women
	•	Harnessing Data for Public Health Decision-making: Process Challenges and Innovations
		<b>Dr. Henry Victor</b> World Health Organization (WHO)
12:00 - 12:15	•	Coffee Break and Prayer Time

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### 12:15 - 13:15 • 8th Session: Data Innovation for Sustainable Development

Moderator: Mr. Salah Al Saleh United Nations Population Fund (UNFPA)

Advancing Moldova's Data Ecosystem: Digital Transition, EU Harmonization and Administrative Data Integration – Digitization of Moldova's Statistical System for a Modern Data Ecosystem

**Dr. Oleg Cara** General Director of the National Bureau of Statistics in the Republic of Moldova

Strengthening Population Data Analytics and Visualization: Insights from UNFPA's Population Data Portal

**Dr. Willis Odek** United Nations Population Fund (UNFPA) (Remotely)

 Moldova's Path to Digital Transformation and AI: Strategic Vision and Regulatory Developments: Advancing Digital Moldova for Efficient Governance and Informed Decision-making Process

#### Mr. Artiom Cociu

Head of office for coordination of the implementation of government priorities Prime Minister Office in the Republic of Moldova

#### Population Estimates and Projections

**Dr. Sara Hertog** United Nations Department of Economic and Social Affairs (UNDESA) (Remotely)

#### Discussions

#### 13:15 – 13:45 🔶 9<sup>th</sup> Session: Doha Declaration

Moderator: Mr. Saoud Al-Shammari National Planning Council

Discussion and Adoption of the Doha Declaration for Innovation in Sustainable Development

#### Lunch and Networking

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