Ghana's Data for Sustainable Development Roadmap Forum

April 5th-6th, 2017

Strengthening Censuses and Surveys

Utilising Administrative Data

Data Disaggregation

Exploring new types of data

Geospatial Data

Open Data

Citizen Generated Data

Big Data

Data Communication

Managing Data Ecosystems

Evidence-based Decision-making

Funding and Capacity Building

Summary Report

STATISTICAL SERVICE GHANA

GLOBAL PARTNERSHIP FOR SUSTAINABLE DEVELOPMENT DATA

UNDP
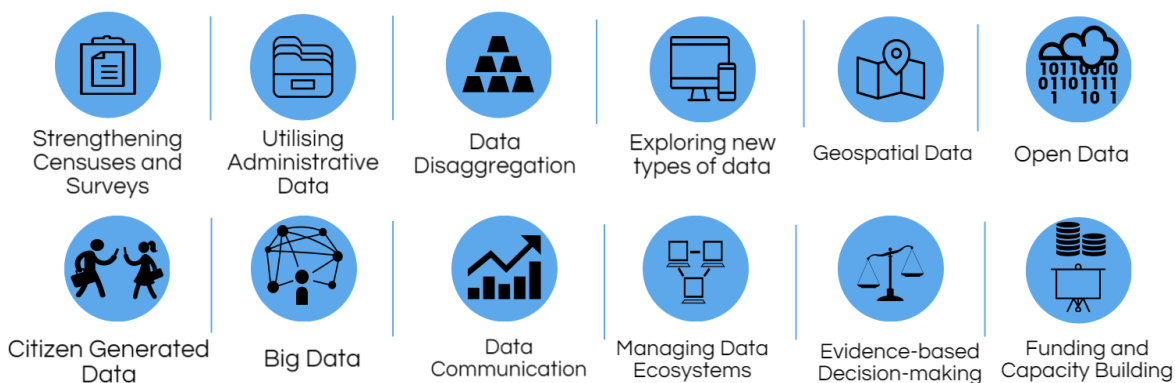
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Abbreviations

AGI	Association of Ghana Industries
BDR	Births and Deaths Registry
CDD	Centre for Democratic Development
CDRs	Call Detail Records
CSO	Civil Society Organisation
DCE	District Chief Executive
DHIMS	District Health Information Management Systems
DRAC	Data Roadmap Advisory Committee
DQAF	Data Quality Assurance Framework
EO	Earth Observation
GHS	Ghana Health Service
GLSS	Ghana Living Standards Survey
GPSDD	Global Partnership for Sustainable Development Data
GSS	Ghana Statistical Service
LGSS	Local Government Service Secretariat
MDAs	Ministries, Departments and Agencies
MMDAs	Metropolitan and Municipal District Assemblies
MMDCE	Metropolitan and Municipal District Chief Executive
NACPUS	National Advisory Committee of the Producers and Users of Statistics
NCA	National Communications Authority
NDPC	National Development Planning Commission
NITA	National Information Technology Agency
NSDS	National Strategy for the Development of Statistics
NSS	National Statistical System
ODIN	Open Data Inventory
RIPS	Regional Institute for Population Studies
SADA	Savannah Accelerated Development Authority
SDGs	Sustainable Development Goals

UNDP   United Nations Development Programme

Executive Summary

1.1   Introduction and context for the Forum

Ghana's Data for Sustainable Development Roadmap Forum took place in Accra on 5th and 6th April, 2017. This forum was intended to highlight the crucial issues that the country must tackle in order to build a data ecosystem that is fit for purpose, capable of capitalizing on the data revolution and providing critical information for data users, to ultimately lead to better outcomes for Ghanaian citizens.

The forum was organized by the Ghana Statistical Service (GSS), in collaboration with the SDGs Implementation Coordination Committee and with support from the Global Partnership for Sustainable Development Data (GPSDD) and UNDP, with guidance from the UN Data Group, and support from the World Bank.

This gathering was held against the backdrop of the Sustainable Development Goals, and building on the foundations of the National Strategies for the Development of Statistics (2009-13 and 2017-21), various sectoral initiatives and forums, and the mapping and alignment exercises that have been carried out with MDAs and MMDAs which produce key datasets for SDG reporting. Bringing together a diverse set of data producers and users, as well as national and international experts to discuss the way forward, the forum's content was focussed on exploration of how new technologies and approaches can be used to strengthen the data ecosystem in Ghana.

1.2   What the Forum aimed to achieve

Data Roadmaps are long-term processes through which Data Ecosystems work iteratively to identify and overcome specific data issues, while strengthening systems, processes and structures to create sustainable solutions. In the long-term, this process is intended to have the following outcomes:

- Data producers will be clear about their responsibilities with regard to data production for the SDGs and other agendas in the short, medium and long-term. The objective is also to engage with non-state actors in this regard as part of a broader ecosystem for data.
- Data users will be facilitated in finding information and will have mechanisms through which they can interact with the data producer community.
- Ghana's National Statistical System (NSS) will have a clearer picture of resource availability for its activities and ways to manage coordination.

The Forum was organized around 3 themes and aimed to achieve the following outcomes:

1.2.1   Theme 1: Addressing data gaps
- Present the current situation for Ghana to produce SDG indicators and highlight data gaps.
- Discuss opportunities to strengthen census and survey regimes.

- Discuss opportunities to further develop the administrative data system with a view to ensuring harmonization, comparability, and quality of data.
- Present possibilities for using new data/ technology to address identified data gaps and engage new actors.
- To determine how alignment with national and regional agendas will impact data collection and indicator production and reporting.

1.2.2 Theme 2: Encouraging data use
- Have an open dialogue with key users on how data/ statistics produced can better meet their needs.
- Identify ways to harness the opportunity of the momentum around data for the SDGs to strengthen the sharing, accessibility and presentation of data.
- Raise the profile of data production and use with key stakeholders including policy-makers to encourage the use of improved data for evidence-based decision-making and accountability.

1.2.3 Theme 3: Strengthening the Data Ecosystem
- Solidify the multi-stakeholder approach to achieving and measuring the SDGs, and create new data communities.
- Identify and discuss solutions to major funding gaps.
- Identify and discuss solutions to major capacity gaps.
- Provide an opportunity for country-to-country learning in the SDG indicator production process.
- Ensure high-level political and policy-maker buy-in for the Roadmap process.
- Identify key issues for the policy and enabling environment for the data ecosystem.

1.3 Overview of Forum sessions

The Forum consisted of a number of sessions, both in plenary and smaller focused discussions. The panelists and participants were a mixture of national and international participants (for a full list of panelists and descriptions of each session, please see the Forum Agenda on www.statsghana.gov.gh).

The welcome remarks for the Forum were delivered by Mr. Baah Wadieh, Acting Government Statistician, the Opening Remarks were delivered by Hon. Ken Ofori Atta, Minister for Finance, and the Keynote Address was delivered by the Vice President of Ghana, H.E. Mahamudu Bawumia. Solidarity messages were also offered by development partners and other stakeholders in the data ecosystem.

The subsequent sessions were as follows:

- Session 1: Ghana's Approach to Implementation of the SDGs
- Session 2: SDG Data Requirements, Gaps and Opportunities for Ghana
- Session 3: Data Roadmaps for Sustainable Development
- Session 4: Country Experiences of the Data Roadmap Process
- Session 5: Leave No One Behind: The Importance of Data Disaggregation
- Session 6: The Potential of Administrative data
- Session 7: Parallel Sessions

- o Parallel Session A: Strengthening Administrative Data Systems
- o Parallel Session B: Production of environmental and spatial data
- o Parallel Session C: Tools and infrastructure for data communication, advocacy, evidence-based decision-making and accountability
- o Parallel Session D: Producing sex-disaggregated and gender sensitive data
- Session 8: Open Data for SDGs in Ghana
- Session 9: Policy and Enabling Environment
- Session 10: The Roadmap Forward

1.4 Where does the roadmap go from here? Priority areas for action

The Sustainable Development Goals mark a watershed moment for data and statistics worldwide. No longer viewed as a purely technical process for monitoring development outcomes, **the entire data cycle from choosing which policy areas to focus data collection on, through to communicating findings is now considered vital to driving innovations in service delivery and production that will ultimately achieve** *The World We Want.*

As the Vice President remarked in his Keynote address to this Forum, Ghana has made great strides and is now ready to go further in unlocking the potential of data for targeted development in the country that would ensure that we *leave no one behind.*

The Data Roadmap Forum was intended to be a first step towards unlocking that potential through focusing on 3 themes, relating to data production, use, and the functioning of the data ecosystem. These three areas need to be considered together to ensure that data can help to drive and achieve development outcomes over the lifetime of the SDGs and beyond in Ghana. What follows is an overview of the strategic direction which forum participants indicated would be helpful in the immediate future under these themes. More specific recommendations may be found in Section 4.

Broadly, the key changes that need to be made in the coming years to unlock the potential of data are: increased emphasis on **administrative data** and innovations in integrating **new types of data** into official statistics, while **maintaining a rationalized census and survey programme**; pursuit of **Open Data** and better communication and presentation of data to ensure data production **supports evidence-based decision-making**; and creating space for **new actors, processes, technologies, and capacities** to contribute to a data ecosystem which is supported by enabling policy and budgets.

1.4.1 Addressing data gaps

The SDGs pose **3 key challenges** with regard to the production of data: the call for **data disaggregation**, the need to collect data on **new thematic areas**, and the need to produce **more timely and frequent** data than before. Data disaggregation relates to ensuring that reliable data are produced for many different sub-populations, (e.g. sex-disaggregated/ geographically-disaggregated data), while new thematic areas include for example, environmental data where there has been little focus in the past.

Addressing Data Gaps must be tackled in a number of ways. Chief among these, is the need to rebalance the emphasis placed on censuses and surveys for data production by committing to invest in the

administrative data system of the country. This will require concerted effort from a number of actors, in particular the line ministries responsible for the generation of the majority of administrative data in the country, from private sector organisations which also produce large amounts of data, from central government who must resource the creation of the system, and development partners to support this effort. Ghana Statistical Service for its part, must stand ready to provide technical expertise and direction for the creation of this system as well as inform its content.

Censuses and surveys will also continue to provide key information and should be considered a cornerstone of the statistical system. A number of innovations could strengthen the census and survey regime however, relating to the mode of data collection, processing, communication and dissemination, as well as rationalizing the censuses and surveys that are conducted in order to make the process more cost effective and the data more useful.

Coming as they do in the midst of the "Data Revolution", the SDGs offer an exciting opportunity to explore the potential of new types and sources of data, for example data from mobile phones or satellite imagery. When used in conjunction with censuses/surveys or administrative data, this "Big Data" has the advantage of providing more granular and timely data in a cost effective manner. Ghana is in a particularly advantageous position given its well-developed census and survey programme, and can be positioned as a pioneer in innovative data and statistical methods not only on the continent but globally.

1.4.2   Encouraging data use

Throughout the Forum, stakeholders made it clear that there is **currently a disconnection between data production and data use** in the country. Again, drawing on the keynote address for the Forum, His Excellency the Vice President related that he wishes to see **producers and users in an iterative feedback loop** to ensure that data produced are policy **relevant, timely** and presented and made available in a way that addresses user needs to ultimately **drive development outcomes**.

Key areas for action to improve data use include making data that is already produced more readily accessible to users, for example through a platform hosted at GSS. In addition, the country must redouble efforts to work towards **Open Data** and in particular producers must commit to releasing data in a format which is easily reusable. A certain amount of upskilling and training will also be required to ensure that producers are comfortable working in this new environment while users understand the processes through which data are translated into evidence for decision-making.

Data interoperability was also an issue which participants returned to many times as being important to encourage data use. Guaranteeing that the formats used for making data available are compatible, and that concepts, definitions and classifications are standardized would be powerful in allowing users to link data sources and make new kinds of enquiry possible.

1.4.3   Strengthening the data ecosystem

Taking a data ecosystem approach acknowledges the contribution that different stakeholders can make to the production and use of data, as well as the need to address enabling elements such new capacities, processes, policies, infrastructure and financing.

To allow for as many stakeholders as possible to contribute to data for development in the country, there will be the need for renewed **emphasis on coordination and collaboration**. Ghana Statistical Service, it was agreed, would take the lead both in coordinating the national statistical system with particular emphasis on strengthening statistical activity at the district level, and in pursuing and/or supporting innovative collaborations with both national and international stakeholders. These stakeholders may be drawn from civil society, academia, the private sector, and development partners. Moreover, in order to sustain the engagement begun at the Forum, the multi-stakeholder Roadmap Advisory Committee will be strengthened and a number of working groups established to take forward particular agendas.

Additionally, the **policy and enabling environment** will need to be transformed through a process of new and revised laws, legislative instruments, and guidelines to ensure that the data ecosystem can flourish including passing the Statistics Bill, the Right to Information Law, reviewing/communicating data protection guidelines, etc.

Underpinning the functioning of any data ecosystem will be a commitment to make **sufficient resources** available from the appropriate sources, with the majority being drawn from the Government of Ghana and strategic support offered by development partners.

Finally, the data ecosystem must also consider how it will communicate and **sensitize the general public** and data providers to the importance of its work and make clear the ways in which data are used for the needed outcomes for citizens.

1.5   Expression of thanks from the Acting Government Statistician

I commend all who contributed to the discussions in the lead up to, during, and following the Data for Sustainable Development Roadmap Forum. Your inputs are greatly appreciated and are reflected in the report which follows. Your engagement will continue to be vital as we move forward to build a new Data Ecosystem, and I encourage all recipients to circulate this report widely. My hope is that this report will be just the beginning, and that it may stimulate new ideas and innovations that will ensure data driven development in the country, leading to better outcomes for all Ghanaians.

I would like to thank the Global Partnership for Sustainable Development Data, the UNDP and the UN Data Group, and the World Bank for their support in organizing this forum. I would also like to acknowledge the hard work of the multi-stakeholder advisory committee established to oversee the organisation of this forum, and members of my own team at GSS, including those operating as the advisory committee's secretariat, rapporteurs, and all other support staff, who worked so hard to make this event a success.

Mr. Baah Wadieh

Acting Government Statistician

2 Day 1: Setting the Scene and outlining areas for discussion

2.1 Welcome Address by the Acting Government Statistician, Mr. Baah Wadieh

The Acting Government Statistician, Mr. Baah Wadieh welcomed all participants. He remarked that the Forum was taking place at a moment of considerable change for the global data community marked by the Sustainable Development Goals (SDGs) and their underpinning Agenda 2030. In addition, Ghana has also committed to regional and continental commitments such as AU Agenda 2063 and has its own national ambitions. Together, these aspirations place a considerable data burden on the country and a multi-stakeholder or data ecosystem approach will be required to meet these needs.

Mr. Wadieh also laid emphasis on the importance of connecting to the global data movement to learn from other countries' experiences and to have access to new innovations and technologies. In this vein, he acknowledged Ghana's recent membership of the Global Partnership for Sustainable Development Data (GPSDD) and their assistance in organizing this Forum. He also thanked the UNDP and the World Bank for their support.

With regard to the structures in place to oversee the organisation of the Forum and the implementation of the recommendations, Mr. Wadieh acknowledged the efforts of a multi-stakeholder advisory committee which was put in place just a few months before the Forum. The Acting Government Statistician also thanked members of his own team and the National Information Technology Agency for providing connectivity.

Mr. Wadieh ended by entreating all present to make connections, share knowledge and learn from others, and to pursue innovative ideas to contribute to the data roadmap towards sustainable development in Ghana.

For a full transcript of the Welcome Address, please see Appendix 1.

2.2 Opening Remarks, read on behalf of the Minister for Finance, Hon. Ken Ofori Atta

In his Opening Remarks, read on his behalf, the Minister for Finance Hon. Ken Ofori Atta outlined the evolution of the Sustainable Development Goals as successor to the Millennium Development Goals. Ghana, he remarked, was a critical player throughout the negotiations of the new agenda.

The Honourable Minister went on to explain that the SDGs consist of 17 goals, 169 targets, and 230 indicators and reflect the participatory nature in which they were agreed upon. They prioritise areas that matter to all nations including ending poverty and hunger, guaranteeing health and education, gender equality, clean water and energy, combating climate change, responsible consumption, and preserving life on land and in the sea. As Minister for Finance, he remarked that he is particularly focused on goals relating to economic equality, innovation and infrastructure and building sustainable cities. Underpinning

each of these goals was a commitment to peace and justice and to work together towards their achievement, he said.

The international community has also developed a set of indicators for the goals for countries to report on, and Ghana Statistical Service (GSS) continues to play an active role in this process as well as carrying out consultations with national-level stakeholders.

Further to this internal work, the Hon. Minister remarked that GSS had also positioned itself as a key player in the global community and had joined the GPSDD. He also welcomed the diverse range of stakeholders that had gathered for the Forum and stated that political actors also had a vital role to play in championing data use and resource allocation.

He concluded by declaring the Ghana Data for Sustainable Development Roadmap Forum officially open.

For a full transcript of the Opening Remarks, please see Appendix 2.

2.3   Solidarity Messages
Solidarity messages were then delivered by a number of partners.

2.3.1   Dr. Grace Bediako, NDPC
Dr. Grace Bediako began by outlining the partnership that NDPC has pursued with GSS and other governmental agencies to promote statistics over the years. She outlined, for example, a statistical assessment that took place in 2016 which indicated that there are major capacity gaps and a lot of work needs to be done particularly around monitoring and evaluation.

She also remarked on the increased demand on the National Statistical System (NSS) to produce data for indicators to aid the planning process and called on the Vice President's office to champion the cause of statistics from this point onwards.

2.3.2   Dr. Claire Melamed, Executive Director, Global Partnership for Sustainable Development Data
Dr. Melamed began by thanking the organisers of the forum, expressing her gratitude to have been invited to speak. She recognized the growing importance of data around the world and stated that in order to do well we must know well and that there are now new and exciting ways of knowing. These include new sources of data, e.g. mobile and satellite data, which give an unprecedented opportunity to understand and create a three dimensional picture of the world.

Dr. Melamed went on to describe the Global Partnership as being created to serve as a place where stakeholders will meet to examine the vast need for data and share innovations and methods to meet those needs.

She concluded with her expectation that this Forum would create an agenda that would act as the building blocks for Ghana's Data for Sustainable Development Roadmap.

2.3.3 Susan Ngongi, UNICEF Ghana Country Representative, on behalf of UN Resident Coordinator

Ms. Ngongi began by stating that data is a raw material of development and understanding the current situation of an economy can help to determine where a nation wants to go and how and when it will get there. She further recognized Ghana's successes with regard to census and survey data but noted that the main challenge was in the production of administrative data. The medium and long term plans which Ghana will develop, out of this Forum and other interactions, will, she stated, help the UN System to build a framework that will guide programmes and policies in subsequent years. She closed with an assurance that the UN system is standing by to support the effort to generate quality data in the country.

2.3.4 Nora Bannerman, Association of Ghana Industries (AGI)

Ms. Bannerman stated that from a private sector viewpoint, data production is critical and that industries generate vast amounts of data that could be captured for analysis and dissemination. This data could also be used to monitor and help achieve the SDGs. In her closing comments she appreciated the recognition given to the AGI as a member of the advisory board of the SDGs and pledged that the AGI will help generate the necessary data for the monitoring of the SDGs.

2.3.5 George Osei-Bimpeh, SEND-Ghana, on behalf of the Civil Society Organisation Platform

Mr. Osei-Bimpeh commended the GSS and partners for putting the forum together and acknowledged the progress made as a country. He recognized the contribution of civil society organisations in complementing data production in the country and sees CSOs as partners for the data needed in monitoring the SDGs. He said that the CSOs are ready to work with the GSS to map out what the CSOs can also add to the data that is produced. He further stated the need to involve CSOs at the initial stages of programmes and was grateful to the GSS for involving them in all its deliberations regarding the SDGs.

2.4 Keynote Address delivered by the Vice President of Ghana-H.E. Dr. Mahamudu Bawumia

H.E. Dr. Mahamudu Bawumia, Vice President of Ghana opened his keynote address by remarking that the Sustainable Development Goals embrace a broad development vision and framework that is anchored on an ambitious agenda with large financial footprints. Moreover, he noted that adopting the SDGs at the same time as the data revolution offers an unparalleled opportunity to track implementation of project to reach the goals and achieve development outcomes. **Ghana's attainment of its SDG goals, he remarked, will be critically underpinned by a robust data regime that is collectively supported by all partners, including the private sector, academia, NGOs, bilateral and multilateral institutions in a harmonized manner.**

His Excellency expounded on the link between data and development, noting that data is fundamental in showcasing past successes vis-à-vis development, the status quo, and help to predict much needed future developments. He further explained that statistics has moved from being a simple tool for progress monitoring and evaluation, to becoming a key driver of development programs that allows for more

accurate targeting of interventions, development of new products and services, and better accountability among decision-makers.

The Vice President went on to explain that data is now required which is geographically disaggregated, that sheds light on the lived realities of men and women, boys and girls, and on marginalized groups to address inequalities and structural discrimination that undermines progress. The most recent budget, he noted, included an infrastructure programme targeted at poverty eradication alongside an urban development fund. He emphasized the importance of data in determining the impact of these interventions.

Speaking to the first theme of the Forum "Addressing Data Gaps", Dr. Bawumia explained that alongside the challenge of disaggregation is that of producing data on thematic areas that have hitherto not been areas of focus for the official statistics community. This will require strengthening censuses and surveys but in particular strengthening the administrative data system and ensuring harmonization and interoperability between databases. In addition, attention would also need to be paid to new sources and types of data which, when combined with traditional datasets, allow new types of questions to be asked and answered.

He also outlined the fact that one of the major problems in terms of development in Ghana was the informal nature of the economy and that the government had identified 3 pillars in order to tackle this issue: national identification, a digital addressing system, and enhancing mobile interoperability with banks to promote financial inclusion. This, His Excellency explained, would enable better targeting of poverty alleviation interventions and also enable very valuable data collection.

On the second theme, "Encouraging Data use", His Excellency mentioned that data producers and users must engage effectively with one another. This will ensure that data is made available in a way that is helpful to data users (for example in a format that is easily reusable) and on topics that are relevant to user needs. The onus would then fall on decision-makers to ensure that data is used.

With regard to the third theme, "Strengthening the Data Ecosystem", the Vice President acknowledged that the National Statistical System alone would not be able to produce all of the data required and encouraged all of the stakeholders present to form new data communities around thematic and cross-cutting issues.

Dr. Bawumia closed his speech by noting that the **Data Roadmap would not necessarily be a document but a living process that would continue to evolve**. This forum was intended to begin that process by, in particular,

1. Identifying opportunities to align national development priorities and SDGs.
2. Identifying key data and technology gaps and potential new methods, sources of data and technologies to address them.
3. Understanding the data ecosystem in Ghana and foster the creation of sector-specific and cross-cutting data communities.
4. Identifying key issues on funding, resources, and capacity.

His Excellency closed his address by remarking that there was immense potential of data to drive the development of the country and that this forum was an important step towards unlocking that potential. *For a full transcript of the Keynote Address, please see Appendix 3.*

2.5   Session 1: Ghana's Approach to Implementation of the SDGs

Moderator: Dr. Esther Ofei-Aboagye: Vice-Chair, National Development Planning Commission.

Panelists:
- Dr. Nii Moi Thompson: National Development Planning Commission (Key presenter)
- Mr. Baah Wadieh, Acting Government Statistician
- Mr. George Osei-Bimpeh: SEND-Ghana on behalf of Civil Society Organizations Platform on SDGs in Ghana

Summary

The session focused on Ghana's actions to date on the SDGs, how they have been aligned to national development priorities and what actions have been taken to begin working towards the goals. It also discussed steps that must be taken in the short, medium and long-term to guarantee progress towards Agenda 2030. Overall the discussion found that while Ghana has done work on aligning the national level goals to the regional and global goals, the lack of capacity at district level is a major stumbling block for data production.

Presentation: Dr. Nii Moi Thompson: National Development Planning Commission (Key presenter)

This session began with a presentation from Dr. Nii Moi Thompson of NDPC, who stated that Ghana, through the GSS, is a member of the UN team on the SDGs responsible for defining the SDG indicators. The SDGs were adopted in Ghana during the second year of implementation of the current Medium-term National Development Policy framework; the Ghana Shared Growth and Development Agenda (GSGDA II, 2014-2017). In addition, Dr. Thompson indicated that to effectively implement the SDGs, the NDPC setup a High-level committee constituting Ministers and heads of other state agencies to ensure the SDGs reflected national development priorities.

Alongside the SDGs, Ghana also adopted the AU Agenda 2063: The Africa We Want, in September 2015, which is made up of 20 goals and 172 targets. To ensure effective implementation and management of the necessary national policies, NDPC clustered the 17 goals of the SDGs and 20 goals of AU agenda 2063, around Five (5) Strategic National Development Goals.

- o   Goal 1: Build an industrialized, inclusive and resilient economy
- o   Goal 2: Create an equitable, healthy and disciplined society
- o   Goal 3: Build safe and well-planned while protecting the natural environment
- o   Goal 4: Build effective, efficient and dynamic institutions for national development
- o   Goal 5: Strengthen Ghana's role in international affairs

In his presentation, Dr. Nii Moi Thompson stated that, Ghana adopted a three point approach to the implementation of the SDGs:

1. Alignment: This involved aligning the medium-term national development policy framework with the SDGs
2. Adoption: Adopting the SGDs and Agenda 2063 targets for national development without modification.
3. Adaptation: Some SDGs and Agenda 2063 were adapted with some modification or exclusion based on relevance, measurability etc. into the national development policy framework.

Also, the commission is in the process of producing a policy matrix for the president's coordinated program and medium term policy framework (2018 – 2021) including the PARIS agreement.

Discussion

Speaker	Comments
Mr. George Osei-Bimpeh, SEND Ghana on behalf of CSO Platform	Mr. Osei-Bimpeh stated the need to prioritize the SDGs and how to finance data collection on the indicators that are applicable to Ghana and called for attention to be paid to localizing the SDGs. He underscored the importance of decentralization of GSS which must utilize the existence of Ministry of Local Government and Rural Development to support MMDAs to have their own data for planning Speaking on Transparency and Accountability, Mr. Osei-Bimpeh reiterated the point that there is the need to push for transparency and accountability so that citizens can take control of data production and its usage.
Mr. Frank Asante of Head of Local Government Secretariat	Mr. Frank Asante of the Office of the Head of Local Government Service remarked that administratively, MMDAs are required to include the SDGs targets in their medium term development plans, annual work plan and programmes. To assess the impact, University Ghana Business School has been tasked to assess the work of the MMDAs. In addressing the issues of the capacity of staff of the MMDAs, Mr. Asante said, the Office of the Head of Local Government Service and Ghana Statistical Service have to work together to strengthen the human resource in terms of statistical data production.
Mrs. Dorothy Onny of Ministry of Local Government and Rural Development (MLGRD)	She commented that data is required to help translate policy into actionable programmes and initiatives for rural and urban development. In recent times, she said, some activities of the Ghana Education Service, Ghana Health Service and Ghana Statistical Service were to reported to the District Assemblies so that, any report from the District Assemblies would be inclusive.
Mr. Sylvester Gyamfi, Director of Cooperation and Programme Management at GSS	GSS assisted the MLGRD in terms of capacity building in the area of data analysis and report writing, data dissemination and data production. Mr Gyamfi also said that MDAs needed to recruit staff with statistical background with at least a first degree level of education.

	He stated that the Regional Offices of GSS are being equipped to assist in training the statistical staff of the various MMDAs and providing technical backstopping. This requires that the MMDAs put capacity building into their annual budgets.
Mr. Daniel Armah-Attoh of Center for Democratic Development (CDD)	There is need to critically look at the methodology being used by CSOs to generate data and build a framework to ensure data quality before submitting it as official data.
Mr. Eric Okra of UNFPA	As Ghana is now a middle income country government is required to allocate more resources to data collection and funds released must match funds allocated. Government must also commit to use data to support developmental policies.
Mr. Kofi Amedzro of Land Use and Spatial Planning Authority	Mr. Amedzro asked what systems were in place to update data at the District level apart from the census report?
Mr. Isaac Odoom of GSS	Mr. Odoom commented that one way to strengthen our statistical system is to create statistical units in the MDAs and MMDAs to enable disaggregation of data at the National, regional and district levels.
Mr. Osei-Bimpeh, SEND Ghana	He urged GSS to strengthen capacity of offices at the district level. He added that Civil Society Organisations can also help in collecting district level data.
Dr. Nii Moi Thompson of National Development Planning Commission (NDPC)	In response to the issues raised by participants, Dr. Thompson said that there is a certain level of engagement between GSS and the MMDAs. GSS regional staff are mandated to help the MMDAs to fill in the data gaps. He added that, MMDAs normally provide data from Censuses and Surveys, but there is a need for them to collect accurate data at the local level. Dr. Thompson emphasized that qualitative data is also important and could be produced by CSOs, NGOs and Research Groups.
Mr. Baah Wadieh, Acting Government Statistician	Mr. Wadieh stated that the role of Statistical Service in building a strong statistical system includes: • Collaboration and Coordination among MDAs and MMDAs • The use of Information, Communication and Technology in data collection • Harmonization of existing data from SSNIT, Electoral Commission, Passport Office, and other administrative sources.
Dr. Ofei-Aboagye	The Chairperson in concluding the session emphasized the following points: • MDAs, MMDAs and other stakeholders in statistical data production must coordinate and collaborate; • Capacity building at the district levels is urgently required; • Harmonization of data from different sources will be important to inform decision-making; • Administrative data from MDAs and MMDAs are critical for monitoring the SDGs

2.6   Session 2: SDG Data Requirements, Gaps, and Opportunities for Ghana

Moderator: Prof. Nii Quaynor, University of Cape Coast

Panelists:
- Mr. Omar Seidu, Head of Demographic Statistics and SDG Co-ordinator, Ghana Statistical Service
- Ms. Radhika Lal, Economic Advisor to UNDP and Chair of the UN Data Group
- Dr. Emmanuel Odame, Ministry of Health

Summary

The purpose of the session was to create the platform to share the findings of the initiative taken by the GSS to establish the current situation with regard to SDG data production in Ghana; outline the key thematic data gaps and other complex issues encountered in the country's data ecosystem in the effort to produce adequate and appropriate data for tracking the indicators of the Sustainable Development Goals in Ghana; discuss innovative ways to improve data production as well as deliberate on initiatives and opportunities to meet Ghana's future data needs.

Presentation 1: Mr. Omar Seidu, Head of Demographic Statistics and SDG Co-ordinator, Ghana Statistical Service

The key presentation was given by Mr. Omar Seidu of GSS on Ghana's readiness to report on the SDGs. He began by discussing how Ghana is currently implementing a number of national, regional and global strategies, emphasizing the need for harmonization between these.

He went on to inform the audience that 230 indicators had been agreed upon for the SDGs and these are classified as follows:

- Tier 1: Indicators which are conceptually clear, have established methodology and standards available, and which many countries regularly produce;
- Tier 2: Indicators which are conceptually clear, have established methodology and standards available, but which are not produced by many countries;
- Tier 3: Indicators which do not have any established methodology or standards and which are not produced by many countries;
- Multiple tiers: Composite indicators whose elements are in different tiers.

Mr. Seidu explained that in 2016, the GSS led a data determination process which sought to establish Ghana's current readiness to report on the SDGs. This included establishing:

- Data availability
- Data sources
- Institutions producing the data

- Timeliness of data
- Frequency of data production
- Disaggregation of data- i.e. how data is broken down into component parts like ethnicity, sex etc.
- Other sources of data production

From this analysis, GSS has calculated that the National Statistical System currently produces 62 Tier 1, 2 and multiple tier indicators, and holds some limited data that with improvement could be used to produce a further 63.

The presenter then discussed some of the key challenges to the underpinning message of Agenda 2030, to Leave No One Behind. These included:

- Data disaggregation should be achieved along the lines of *gender, location, socio-economic grouping, disability status* and *other categories* which will require a robust administrative data system in order to meet this challenge.
- Producing data in a timely manner to aid SDG reporting and provide decision makers with up to date information on which to base key policy and investment decisions with the aim of achieving the SDGs.
- Data on new key thematic areas will be required.
- Each of these issues requires a multi-stakeholder approach to data production which is a departure from previous traditional methods of managing data production.

He continued by recommending three (3) major strategies or approaches for addressing data gaps. These include Strengthening Censuses and Surveys; Building an Effective Administrative Data System; and Exploring New Sources and Types of Data.

Mr. Seidu also drew attention to the existing opportunities to make data use easier. These include: making data open for re-use; enhancing communication and visibility of data; ensuring that data connects to decision-making and meets user needs; and ensuring that data is interoperable and harmonized.

He concluded his presentation by outlining the following needs:

- The critical need for increased production of policy-related data that would be more useful in addressing the needs of policy and decision making.

- The need to strengthen the Data Ecosystem: this would require greater collaboration and commitment from all stakeholders, and greater emphasis on the elements that contribute to the Data Ecosystem e.g. capacities, processes, policies and infrastructure.

- Understanding and agreeing on the specific roles and responsibilities of all actors in the data ecosystem; enhancing existing capacity and building new ones; devising processes that reach across government agencies and beyond; developing the policy and enabling environment; taking advantage of existing infrastructure and building new structures where required; and establishing data quality assurance framework.

Presentation 2: Ms. Radhika Lal, Economic Advisor to UNDP and Chair of the UN Data Group

The second presentation was given by Ms. Radhika Lal, Chair of the UN Data Group. Ms. Lal began her presentation by emphasizing that the definition of the SDG indicators is an ongoing process and that each country has flexibility in localizing the SDGs and determining their own national indicators framework.

Ms. Lal stressed that the entire SDGs strategy is dependent on the availability of rigorous quality data to measure progress. She explained that the complex nature of targets and indicators requires data to be collected from a range of sources and actors. And during the collection of data, there is the need to note the varied types of targets relating to each of the 17 Sustainable Development Goals.

The presenter also emphasized the critical need to focus on an appropriate and sustainable financing strategy for the SDGs and attendant data production. This should include different sources of finance, including enhancing domestic resource mobilization.

She concluded her presentation by underscoring the need for every member state of the United Nations to integrate Agenda 2063 and Agenda 2030 with their national development plans. She entreated further that all stakeholders need to find new, creative and innovative ways of conducting data collection exercises e.g. engaging students in data collection exercises, among others.

Presentation 3: Dr. Emmanuel Odame, Ministry of Health

Dr. Emmanuel Odame of the Ministry of Health, the third presenter for this session, commenced his contribution by noting the indispensable role of quality data in monitoring and evaluation. He remarked that data availability helps in finding out whether things are going in the right direction.

Dr. Odame indicated that there are four fundamental questions that needed data to answer, namely:
- How well are we living as a people?
- How well are our resources being distributed?
- How efficiently and effectively are we using our resources?
- What are we leaving for posterity?

In addition to those issues, Dr. Odame, in his conclusion, enumerated the following pressing concerns which need to be addressed by all stakeholders:

- He stressed that macro level data tend to hide true situations. Consequently, there is the critical need for data disaggregation.
- He emphasized the need for new and other types of data which should be collected with the assistance of technology like electronic tablets, etc.
- He underscored the need for results-based monitoring and evaluation systems and the production of statistics on hard to reach populations, e.g. the homeless.

Discussion

Speaker	Comments/ Questions and Answers
Mr. David Opoku, Open Knowledge International	To what extent are we building courses for students in data literacy i.e. promoting statistical literacy in schools?
Ms. Radhika Lal, Chair UN Data Group	In response to the above question, Ms. Lal commented that the internet can essentially serve as a means for promoting statistical literacy. Therefore, students and teachers alike need to think outside the box when it comes to improving statistical literacy.
Mr. Omar Seidu, GSS	Mr. Seidu contributed to the discussion by informing the forum that the GSS is planning to focus more on statistical literacy in subsequent years.
Mr. Kofi Kekeli Amedzro of Town & Country Planning Department	Mr. Amedzro highlighted the need for GPS locations to be factored into surveys to enhance planning. He cited for example that if the Integrated Business Establishment Survey (IBES) had included this feature, it would ensure that the various locations of business establishments would be easily found, promoting accessibility. He further stressed the need for adding geospatial information to planning.
Ms. Radhika Lal, Chair UN Data Group	Alongside advocating that data collection agencies ought to include the informal sector in its data collection, Ms. Lal also stressed that administrative data is very crucial.
Dr. Emmanuel Odame, Ministry of Health	Dr. Odame noted in his closing remarks that since geography is playing a key role in the collection of administrative data, geo-spatial information should form an aspect of the preparatory processes for data collection. He recommended that the Ministry of Education should also focus on technology needs for students as part of the process to enhance their skills and capabilities which would be useful in data collection/capture.
Mr. Omar Seidu, GSS	On his part, Mr. Seidu concluded by cautioning that geo-spatial data needs should be balanced with the need for confidentiality. He urged that there should be more timely and relevant publications based on data collected, and more fora organized for agencies that would utilize such statistical information. Mr. Seidu underscored that ICT is very crucial in this effort. He drew attention to the significance of administrative data and urged that all stakeholders learn from the Danish experience in the utilization of administrative data.
Prof. Nii Quaynor	Prof. Quaynor, urged in his closing remarks that data collecting agencies ought to utilize a wide range of technological devices e.g. computers, iPads, etc. in collecting data.

2.7 Sessions 3 & 4: Data Roadmaps for Sustainable Development & Country Experiences

Moderator: Dr. Claire Melamed, Executive Director, Global Partnership for Sustainable Development Data

Panelists

- Aditya Agrawal, Director of Data Ecosystems Development, Global Partnership for Sustainable Development Data
- Philip Thigo, Office of the Deputy President, Kenya
- Yeama Thompson, Right to Access Information Commission, Sierra Leone
- Suwadu Sakho-Jimbira, IPAR, Senegal

Abstract

The Global Partnership for Sustainable Development Data (GPSDD) has now supported the Data Roadmap process in a number of countries. The Director for Data Ecosystem Development at the GPSDD, in this session discussed the Data Roadmap process, the importance of an ecosystem approach to data production and presented the GPSDD's Toolbox of supportive material for all stakeholders. Representatives from Kenya, Sierra Leone, and Senegal also shared their country experiences on the Data Roadmap process and their activities around data production for the SDGs.

Having reviewed different models that have been successfully implemented in other countries, the question now remained for Ghana to decide on what model for SDG data production will work best?

Presentation 1: Aditya Agrawal, Director of Data Ecosystems Development, Global Partnership for Sustainable Development Data

Aditya Agrawal, Director of Data Ecosystems Development, GPSDD, introduced his presentation with an overview of the data ecosystem. He remarked that countries are facing major challenges given that data is often not available, dynamic, disaggregated, of high quality, usable, accessible, and open or used effectively.

Mr. Agrawal went on to explain that harnessing data revolution for sustainable development is vital to improve decision-making and policy, increase citizen empowerment, innovation and entrepreneurship. Data now exists in many forms, such as earth observation, citizen-generated, or Big Data, and harnessing these requires enablers such as a supportive political environment, and a structural environment that fosters trust.

The GPSDD for its part, seeks to convene, connect and catalyze to ensure that better, more accessible, and usable data is produced. As part of this activity, the Global Partnership supports countries at national and sub-national levels to develop and implement the whole of government and multi-stakeholder data roadmaps for harnessing the data revolution for sustainable development, with particular emphasis on the SDGs and local priorities articulated in national plans. A data roadmap is therefore, an action plan with

short and long-term goals for addressing specific data needs and priorities with regard to SDG implementation, and is designed following an iterative approach.

Presentation 2: Philip Thigo, Office of the Deputy President, Kenya

Philip Thigo, of the Office of the Deputy President, Kenya, reflecting on the experiences of Kenya's data roadmap process, noted that high-level political will and commitment from the offices of the President and Deputy President provided a platform to engage multiple stakeholders in the development of a national data roadmap for the SDG declaration, launch and implementation.

He highlighted government collaboration with the private sector, civil society, and bilateral donors, among others, to engineer the processes of financing data production for the SDGs and development. Mr. Thigo drew attention to Kenya's partnership with universities in building statistical capacity of decision-makers and data communicators on data analysis and use. He called on countries to put in place structures and mechanisms to coordinate data production within the national statistical system, civil society, academia and the private sector to ensure intra-sectorial coordination and comparability of data.

Presentation 3: Yeama Thompson, Right to Access Information Commission, Sierra Leone

Yeama Thompson, Right to Access Information Commission, Sierra Leone, discussed how Sierra Leone signed up to the Open Government Partnership in 2013 including passing a robust and proactive Archives and Records Management Act to support the implementation of the Right to Access Information Act in a bid to improve transparency. Other commitments made by Sierra Leone were the implementation of the Right to Access Information Law and the establishment of an open data portal to improve transparency.

She noted that, SDG implementation requires a whole government and multi-stakeholder approach to be successful at the local, regional and national levels and that countries should create an environment conducive to citizens' engagement and participation. By this approach, according to her, it is possible to meet the goal of "leaving no one behind" as has been called for by the post-2015 agenda and the SDGs. She emphasized effective coordination of activities of all players within the data ecosystem as being critical.

Presentation 4: Suwadu Sakho-Jimbira, IPAR, Senegal

Suwadu Sakho-Jimbira, of IPAR, Senegal, observed that institutional reforms to the National Statistical System have led to the improvement in statistical capacity in Senegal, with significant impact on data availability to monitor the SDGs. She noted that though data for indicators that reflect Senegalese priorities are available, some indicators would need to be derived through relatively simple data manipulations. However, countries should endeavor to ensure that economic and social dimensions of sustainable development activities implementation are not highly prioritized in the national plans over issues on governance and environment. She noted that to improve data availability for tracking the progress of the SDGs targets, there is the need to improve coordination between the members of the National Statistical Systems for the production of accurate, reliable and timely statistics to monitor progress toward the achievement of the SDGs. A major limitation to data availability, according to her, is

the insufficient disaggregation of data at regional and local level. There is therefore, the need to disaggregate data to the lowest possible level to ensure that the hope of ''*leaving no one behind*'' becomes a reality.

Discussion

Speaker	Comments
Dr. Claire Melamed	The moderator asked Mr. Thigo to elaborate on the mechanism for consultation and collaboration operational in Kenya
Mr. Philip Thigo	Mt Thigo said because Kenya is a highly devolved country, the government had put in place sector-focussed intergovernmental agreements between the county and national levels which includes the private sector. For example, this model has been used to establish an intergovernmental forum on agriculture.
Dr. Claire Melamed	The moderator then called for questions from the audience noting that the issues seemed to be less about data availability and more about interoperability across government departments and with the private sector and civil society. She therefore encouraged questions and comments particularly from private sector and civil society participants.
Question from the floor	What difference has the right to access information law made in Sierra Leone?
Yeama Thompson	It is still in its early days and a multi-stakeholder process will help to achieve the implementation of the law through the Open Data Council. By bringing civil society on board, they have ensured that they will advocate and be proactive around this issue.
Tom Orrell, Publish What You Fund	Three different models for the data roadmap process were presented: -Kenya: led by the Vice President's office -Senegal: led by the National Statistical Office -Sierra Leone: Led by the Information Commission My comment is more of a challenge to the Ghanaian colleagues in the room to think about which model will work for them or if they require a completely new model. My second point relates to interoperability. What is the approach of these governments to the use of standards, formats, and open data formats where appropriate; how do you actually manage a more technical process, how do you link up what you are doing at the national level to the requirement to report internationally?
David Opoku, Open Knowledge International	Question to Sierra Leone. Ghana is struggling to pass its Right to Information Bill; does a country need to have a Right to Information Law before it can start to do work on the roadmap?
Yeama Thompson	In Sierra Leone's case the Right to Information Bill certainly helped the process, but in general, this is not a pre-requisite for a data roadmap
Dr. Claire Melamed	In conclusion, Dr. Melamed commented that the areas of focus she was taking away from the session were data disaggregation, administrative data, collaboration and political institutions.

2.8   Session 5: Leave No One Behind: The Importance of Data Disaggregation

Moderator: Bernard Avle, CITI FM

Panelists

- Anthony Amuzu, Deputy Government Statistician, Ghana Statistical Service
- Jenna Slotin: Deputy Director, Global Partnership for Sustainable Development Data
- Dr. Charles Abugre, Savannah Accelerated Development Authority (SADA)
- Dr. Andy Tatem, Flowminder

Summary

The SDGs, and the underpinning Agenda 2030, have made a commitment to *Leave No One Behind.* This session explores what this means for data production in Ghana and focus on some of the key priority areas for action in order to fulfil this aim. In particular, panelists will discuss the challenges and importance of data disaggregation along the lines of gender, location, socio-economic grouping, and other characteristics.

Ultimately, Leave No One Behind is the core of the SDGs that sets them apart from the MDGs and requires a new policy approach which focusses on the most marginalized groups first. Data disaggregation puts a spotlight on these groups and can help to address the issues facing them. In Ghana for example, the Savannah area has been left behind and data could begin to address this issue.

During the discussion, there was significant discussion regarding privacy and suggestions for how to combat the risk of abuse of disaggregated data. Moreover, there was focus on the need to adequately fund the data system to produce disaggregated data as well as look for opportunities to form new partnerships with data producers and users to achieve development outcomes.

The session took the form of a moderated discussion.

Discussion

Speaker	Comments
Bernard Avle	What do you understand by data disaggregation?
Jenna Slotin	The availability of data at the national, regional and district level even at the community level. The transition from MDGs to SDGs is marked by the commitment to leave no one behind. Data disaggregation creates more opportunity to identify the vulnerable in society especially the marginalized.
Bernard Avle	What is the general idea behind the Savannah Accelerated Development Authority (SADA)?
Dr. Charles Abugre	About 54% of the land of Ghana is under the Savannah area, yet the level of malnutrition in this area is very high and per capita income low.

	Disaggregation of data will help identify the issues there to ensure we leave no one behind.
	
	Ghana may be a middle income country, yet that area (Savannah) is not. SADA is a special initiative created by law to do the following:
	    1. Planning using spatial approach
	    2. To have authority to release funds for development
	    3. To partner with NDPC to accelerate development in these area.

Bernard Avle	What is the extent of data disaggregation in GSS?
Mr. Amuzu	As an institution (GSS), we do our best to disaggregate data. Our major source of data is through surveys and censuses. In terms of surveys, the lowest level of disaggregation is done to the district level. Especially in the poverty profiles produced from GLSS6 and 2010 Census data. Disaggregation requires financial support. One thing we want to do which will be less costly is to design a template for the MMDAs to have accurate data collection at the district and community level. This will help in data disaggregation so we do not leave anyone behind.
Bernard Avle	What does disaggregation involve?
Dr. Andy Tatem	To get data in disaggregated form needs special skills which requires investment. Sources of data for disaggregation can come from traditional sources such as the Census and Survey and administrative forms; other sources of data can be satellites, mobile phones and other digital data. Disaggregation of data helps in mapping of poverty for example to the lowest level of disaggregation which can help decision-makers to target those people directly.
Bernard Avle	What do you see to be prioritized in leaving no one behind?
Dr. Charles Abugre	Support for SADA initiatives is essential to ensure that no one is left behind. This is about growing the economy, making water available and ensuring that people get access to the available water and also ensuring that people living in the savannah areas are benefiting from the policies put in place to enhance development. SADA is putting in place geospatial data to help identify key areas for development. Geospatial data is being used for property mapping and identifying where development is necessary and also in raising revenue. The supports for this kind of development are in the universities.
Bernard Avle	Generally, what are the challenges in achieving data disaggregation?
Jenna Slotin	Leaving no one behind is a loud cry to get political leaders to commit funds and show political will around this issue. If they are able to understand the importance of data disaggregation, it can help leaders to achieve developmental policies. Finding flexible ways for stakeholders to collaborate is also necessary.
Bernard Avle	What is the link between data disaggregation and availability of data? Is GSS considering using technology in data collection?

Mr. Amuzu	GSS has started using technology in data collection. Such technology includes the use of CAPI (tablets), and this has really helped to release reports on time since the data collected is quickly transferred to the central office as soon as the data is collected, and it does not delay in the analysis of it. In the case of mobile usage data, GSS cannot produce or generate such data. It is the telecommunications companies and the various communication network owners who can produce data on mobile users. And the data the telecommunication groups produce is not disaggregated and this makes it difficult to analyze it in a disaggregated form.
Bernard Avle	How easily could Ghana produce mobile data in disaggregated form?
Dr. Andy Tatem	In the case of Haiti and Namibia, we helped them by getting the data from the Telcos in a format we wanted which needs to be in disaggregated form and we used this information to identify the number of mobile phone users at a particular point in a disaggregated form.
Audience Discussion	
Dorothy Gordon (formerly AITI-KACE)	We have to develop the ability to use data from the Civil Society Organizations (CSOs), since majority of them sit on data. On the issue of mobile data, The National Communications Authority (NCA) is the institution responsible for collecting data on mobile phone subscribers. As at about 6 months ago, data was available but not disaggregated by sex. Huge numbers of people in the northern sector of the country use mobile phone, yet few of these are women. The use of mobile devices to collect data is a good idea, but the challenge is the qualified personnel with adequate skills to use the device in data collection.
Jenna Slotin	Leaving no one behind requires resources to merge mobile and digital data with traditional data sources in order to produce the right data for development
Samuel Annim (University of Cape Coast)	If we decide to disaggregate data, it is about choice. Whether disaggregation is to be done at the point of data collection or the point of analyses of the data collected. This can be said about linking household data to the individual respondent during the field exercise especially in Ghana Living Standards Survey (GLSS).
Rikke Sig Hansen (CSO Platform for SDGs)	Standardization of data collection is very necessary in collecting mobile phone data. Accessibility of data is also an issue. Getting data at a click of the button helps to make accessibility of available date very convenient, so that stakeholders and data users can get access to all the data available for their various tasks.
Dr. Abugre	In responding to a question "what type of data is not available and what are we doing about it?" Dr. Abugre noted that data is not available on even basic topics like water sources and without this there is no way to get reliable data to support

	agricultural activities. Officers in the districts need training in basic Excel skills so that data collection and analysis can be made easier.
Mr. Amuzu	GSS did an assessment of the Civil Registration and Vital Statistics system, and we have put in place strategies to analyse data from the Births and Deaths Registry. This is one of the areas we are using mobile device in collecting data.
Andy Tatem	Most countries use mobile device in collecting data with Global Positioning System (GPS), yet GPS data is not being used.
Philip Thigo, Kenya	There should be collaboration between the political leaders and the regulators to help provide data in a disaggregated format.
David Opoku, Open Knowledge International	Once we have this disaggregation of data, we should ask ourselves the following questions: • How is that disaggregated data being used? • What steps are we putting in place to stop abuse of disaggregated data?
DANIEL Armah-Altor (CDD)	How are we going to resource the local agencies to collect data in the disaggregated form?
Kofi Amedzro (Land use and spatial plan Authority, former Town and Country Planning)	Agencies working in spatial data collection should try and harmonize their spatial data and plan to fit into the national spatial plan so that it can be updated annually.
Mr. Amuzu	In addressing the abuse of disaggregated data, since GSS does not link individuals to the various variables, we do not see how data users can abuse it.
Jenna Slotin	The challenges associated with disaggregation of data are there, but the opportunities also exist, so we need to work hard to address the challenges, we need to collaborate with all stakeholders to play their role to overcome these challenges.
Andy Tatem	We need to be security conscious about the way we use disaggregated data. This disaggregated data is expensive to collect.
Moderator's Concluding Remarks	Issues we need to address as a country to ensure we leave no one behind includes: • Dealing with challenges associated with the use of technologies to collect data at a disaggregated level • Data planners and spatial planners need to work together more effectively and efficiently • Commitment of political leadership needs to help to deal with issues concerning data disaggregation.

3 Day 2: Deep dive on key data issues

3.1   Session 6: The potential of administrative data

Summary

Administrative data is collected by public bodies in the course of their work. The production of statistics based on this data is not the main reason for their collection. Cooperation between administrative authorities is therefore crucial to ensure that the data produced can be used for statistical purposes and it must be understood that the data must only leave the National Statistical Office as aggregated, rather than individual data.

A strong administrative data system can yield more timely, cost effective and granular data production. This session explored the advances made in the field of administrative data production in Denmark and drew out lessons for Ghana.

Presentation: Maciej Truszczynski, Statistics Denmark

A presentation was made by Maciej Truszczynski of Statistics Denmark who introduced the audience to statistics production from administrative data and the key uses and benefits of administrative data using the Denmark experience.

He explained administrative data as that collected by public authorities for administrative purposes. He stated some of the advantages of Administrative data as the following:

- Ensures national ownership
- Low cost in comparison with other modes of data production
- Wide coverage and continuity
- Source of evidence-based policy making
- Often comes with a geospatial dimension
- Can be linked to other types of data

He also mentioned some of the preconditions for the generation of administrative data as:

- Political courage to enforce unique identifier for individuals, enterprises and fixed property – but a gradual approach is definitely possible
- Appropriate legislation
- Public approval

The risks involved in the production of administrative data he mentioned include: pressure for administrative use of statistical data, risks associated with security glitches, and any changes in administrative procedures can lead to an erosion of data coverage, but that these risks can be mitigated against.

In improving the database there is no need to start from the scratch. Denmark began with the population register and gradually built upon it to get to where they are now. Some examples of administrative data include the use of VAT data as primary source, data provided by the tax authorities, etc.

The presentation concluded with the following points for consideration:

- Is a wider use of administrative data in statistical production desirable in Ghana and what initiatives could target this goal?
- How can you raise the awareness of decision makers about this goal?
- How could you improve cooperation between institutions?
- Use of basic administrative regions can provide major leaps for data disaggregation- how can you reach the most vulnerable in a cost-effective way?
- Think about the technology required- often a mobile phone is enough
- Is free data from the private sector a possibility?
- Think about the competencies and capacities required- where are your training needs going to be?

3.2   Parallel Session A: Strengthening Administrative Data Systems

Moderator: Anthony Amuzu-Pharin, Director of Social and Demographic Statistics, Ghana Statistical Service

Panelists

- Henrik Bang, Statistics Denmark
- Pernille Stender, Statistics Denmark
- Rev. Kingsley Addo, Births and Deaths Registry, Ghana
- Frank Amoyaw, PEPFAR

Summary

This session began with two presentations from Statistics Denmark on education and labour market accounts data and went on to focus on ways to strengthen the administrative data system in Ghana, by working across departments and ministries and building enabling systems. Recent work on Civil Registration and Vital Statistics in the country was presented as an example of what can be achieved when stakeholders come together to build data communities and the resulting policy decisions that this type of data can enable. The use of administrative data by PEPFAR to combat HIV/AIDS was also presented.

Presentation 1: Henrik Bang, Statistics Denmark

The first presentation was given by Henrik Bang of Statistics Denmark and gave an overview of the administrative data system in Denmark and the place of the education register within this. The student register, he noted, provides significant amounts of longitudinal data and has been used to conduct analyses such as correlation between grades in basic school and completion of youth education.

The pros of taking this administrative data approach include:

- High quality data
- Good analytical potential
- Low maintenance costs
- Short production time.

The cons however included:

- Relatively low flexibility in terms of changing requirements for data
- The quality of data is dependent on the overall level of regulation and administrative rules

Presentation 2: Pernille Stender, Statistics Denmark

The second presentation was delivered by Ms. Pernille Stender of Statistics Denmark and concerned Labout Market Accounts. She began by describing a longitudinal register containing information on the labour market affiliation of the population- this integrated register is based on information from a number of data sources.

Source data includes that on employees, self-employed, assisting spouses, people receiving public benefits, temporary absence, persons enrolled in education, and old age pensioners. From the register, information on the following can be produced: establishment, paid hours of work, start and end dates, earnings, occupational status. It can also be used to produce derived variables such as whether a person is resident or not in Denmark at a particular point in time. Moreover, the register opens new avenues for analysis such as transitions from education to the labour market, impacts on employment of the economic crisis, etc.

Overall, Ms. Stender remarked that this register has led to new information being collected, a better quality of data, more flexible longitudinal data, and high analytical potential.

Presentation 3: Rev. Kingsley Addo, Births and Deaths Registry, Ghana

Rev. Kingsley Addo, from the Births and Deaths Registry (BDR) made the third presentation and relayed that by the close of 2015 registration points had increased from 36 in 1965 to 412. He further stated that birth registration increased from 31 percent to 63 percent between the years 2000 and 2016 while death registration for the same period increased from 20 percent to 24 percent.

He went on to say that the BDR has maintained cooperation with GSS, and that a Civil Registration and Vital Statistics Assessment was conducted in 2014 and a Strategic Plan Developed. A business process map has also been developed for Births and Deaths events. He was pleased to announce that there is now an interface between the District Health Information Management System (DHIMS) of the Ghana Health Service (GHS) and the BDR District System and also, an intended interoperability of BDR and the National Identification Authority data system. He said the BDR is hoping to improve birth registration from the current 63 percent to nearly 100 percent by the year 2020.

Presentation 4: Frank Amoyaw, PEPFAR

The presentation by Frank Amoyaw from the PEPFAR was centered on HIV epidemic control. Currently there are 274,562 people living with HIV in Ghana. The estimated number of people with new infections is 12,803 and 12,646 annual HIV deaths. The vision of PEPFAR he stated, is to support the government of Ghana to achieve epidemic control by 2020 alongside key stakeholders by addressing gaps in the system, support model sites and strengthening existing programmes to maximize impacts, efficiency and inform national level programming. He stated that PEPFAR was collecting data to monitor key populations and also ensure treatment success through the eTracker. He also said the Ghana Key Population Unique Identifier System integration is currently ongoing and hopes that by end of April 2017, the system will be in place to help in data generation.

3.3 Parallel Session B: Production of Environmental and Spatial Data

Moderator: Prof. Samuel Nii Ardey Cudjoe: Regional Institute for Population Studies (RIPS)

Panelists

- Christine Asare: Environmental Protection Agency, Ghana
- Foster Mensah: Centre for Remote Sensing and Geographic Information Systems (CERSGIS)
- Kofi Amedzro: Land Use and Spatial Planning Authority (formerly Town and Country Planning)

Summary

Around the world and in Ghana, new and innovative ways of measuring environmental performance are being pioneered. Geospatial and other types of Big Data in particular have been shown to be powerful in adding new levels of disaggregation when combined with more traditional datasets. This session explored these innovations, and suggested new ways for stakeholders to work together in Ghana to produce this data.

Presentation 1: Christine Asare: Environmental Protection Agency, Ghana

The session started with a presentation from Ms. Christine Asare, Director, Strategic Environmental Assessment and Legal Affairs, Environmental Protection Agency, Ghana. Presenting on the theme "utilizing new data for environmental indicator production", she indicated that the agency has taken steps to look at what indicators they can produce based on their mandate.

Ms. Asare further observed that production of environmental data is done at various levels by MDAs and most of the data collected are from administrative sources. According to her, environmental data is not widely captured in the national statistical system.

Currently, the EPA in collaboration with some key stakeholders have institutionalized a system that allows for the estimation of cost of environmental degradation and depletion of some natural capital assets in the country on an annual basis with 2006 as the base year. The EPA, she noted, has also initiated a process aimed at institutionalizing a Natural Capital Accounting (NCA) System in Ghana. The NCA will help measure progress on SDG goals six, seven, eleven, twelve, thirteen, fourteen and fifteen. She further explained that a climate change data hub has also been established.

Ms. Asare noted that even though a lot is being done to produce environmental indicators for the monitoring of progress on the SDGs, there are still data gaps, particularly in the mining sector. Moreover, the diverse methodologies used in gathering data across MDAs make their comparison difficult. She concluded by observing that the way forward is for all stakeholders to continue engaging with each other through multi-faceted dialogue aimed at creating an enabling policy environment for the development of environmental statistics.

Presentation 2: Foster Mensah: Centre for Remote Sensing and Geographic Information Systems (CERSGIS)

Foster Mensah of the Centre for Remote Sensing and Geographic Information Systems (CERSGIS) University of Ghana, Legon, explored what has been done on SDG indicators on environment using geospatial data. He observed that a national geospatial policy for the country was prepared for the Ministry of Lands and Natural Resources under the second Land Administration Project. Also, a sub-regional program (SERVIR) funded by USAID and NASA is ongoing. This project strengthens the ability of governments and other development stakeholders to incorporate earth observation and geospatial technology into their decision-making. Under this project, free satellite images are made available to Ghana under free and open information sharing through national and regional platforms and collaborations.

Geospatial data can provide information on SDG goals two, six, nine, eleven, twelve, thirteen, fourteen and fifteen. Some of the mappings that have already been done using geospatial and traditional data include; Indicator 5.1.1 (proportion of population using safely managed drinking water services) and on access to electricity (Fig 1 & Fig 2).

Figure 1: Ensure availability and sustainable management of water and sanitation for all

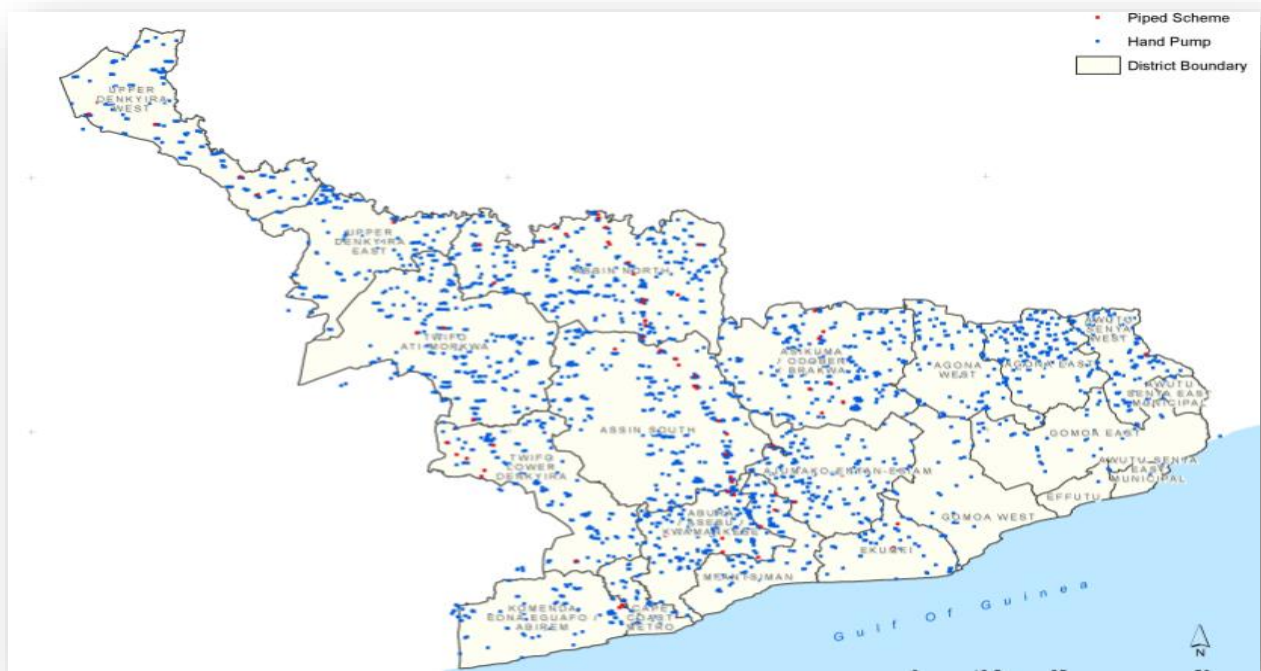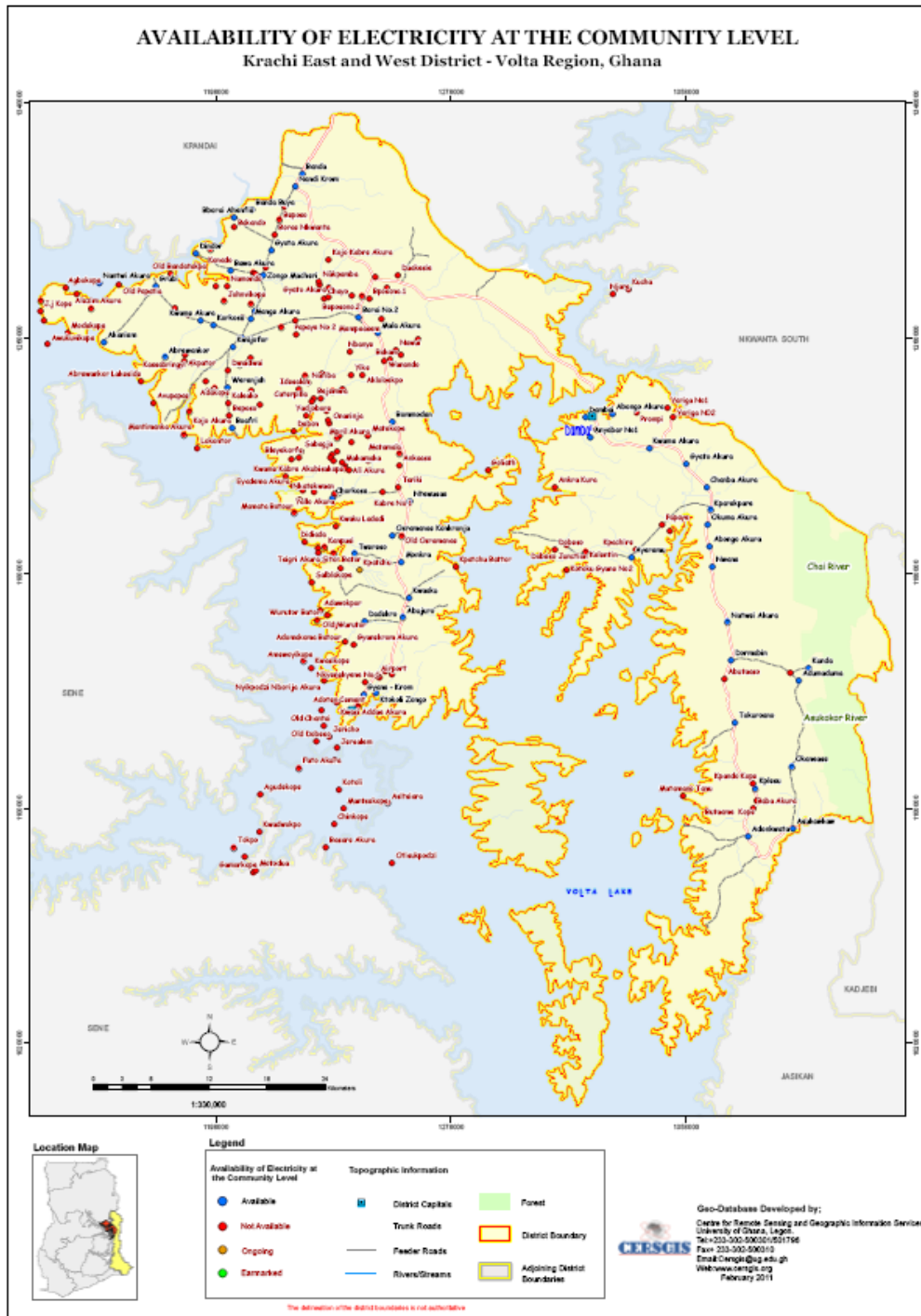*Figure 2: Ensure Access to Affordable, Reliable, Sustainable, and Modern Energy for All*

Other SDG indicators that have been mapped include indicator 9.1.1 (proportion of rural population who live within 2km of an all-season road), indicator 11.1.1 (proportion of urban population living in slums, informal settlements, or inadequate housing), indicator 11.2.1 (proportion of the population that has

convenient access to public transport), indicator 11.6.2 (Annual mean levels of fine particular matter), and Indicator 3.9.1 (Mortality rate attributed to household and ambient air pollution).

In conclusion, Mr. Mensah noted that earth observation and geo-information could provide essential and complimentary data to the traditional data for effective and efficient monitoring of the SDGs. Already there is existing data and sources for free and open satellite images for monitoring the implementation of SDGs. However, a national spatial data infrastructure is required to support sustainable development which includes the SDGs.

Presentation 3: Kofi Amedzro: Land Use and Spatial Planning Authority (formerly Town and Country Planning)

The final speaker for the session, Kofi Kekeli Amedzro, Land Use and Spatial Planning Authority, explained that spatial data helps to establish relationships, trends and patterns. Maps, he observed, display data in a format that is easily understood by all including decision makers. Thus, spatial data analysis makes calculation of population with access to socio-economic facilities like access to school or health facilities very easy. He showed that some work has been done on some of the SDG indicators. For instance, Indicator 13.1 (sustainable cities indicator - ratio of land consumption rate to population growth rate) had been mapped as indicated in Fig 3. Some of the other indicators produced include settlement expansion at MMDA level, percentage share of manufacturing jobs as percentage of total employment at MMDA level, and distribution of district hospitals in Ghana.

Figure 3: Indicator 13.1: Ratio of land consumption rate to population growth rate

Settlement Growth 1990 - 2010
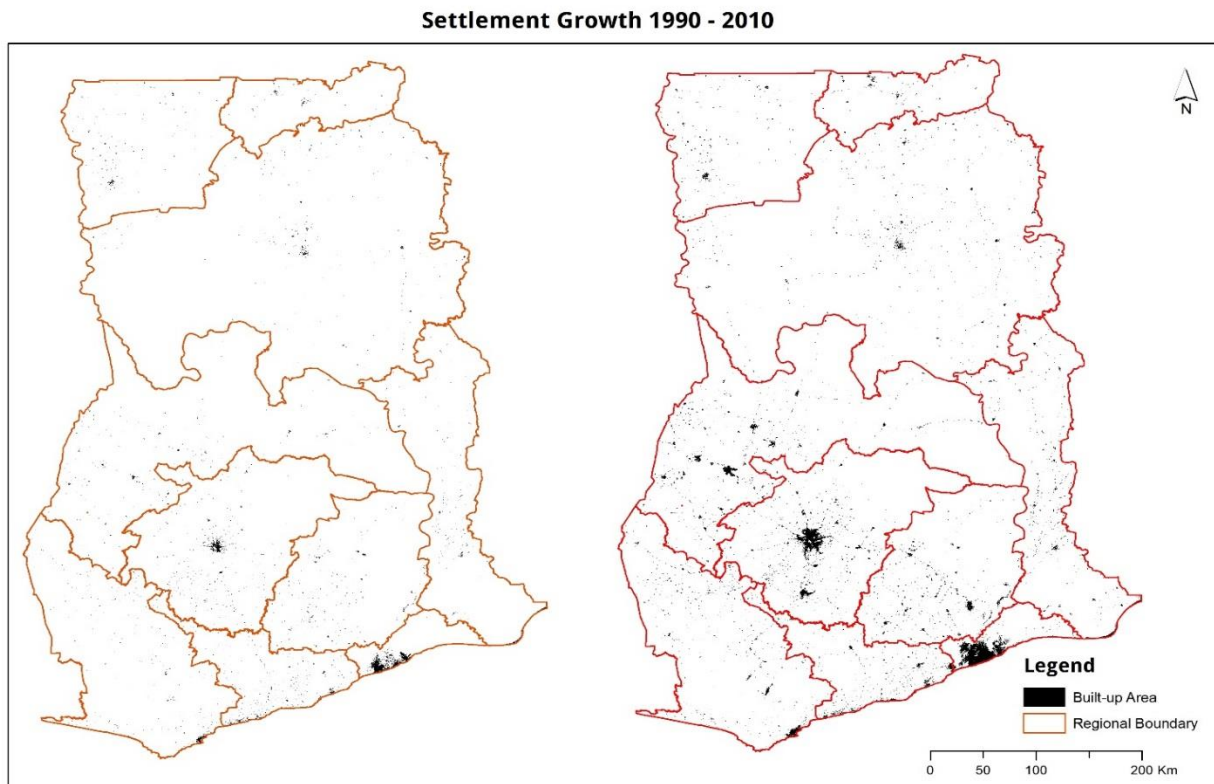
Challenges facing spatial data production according to Mr. Amedzro, include the fact that data are not readily available within the MDAs. And where they do exist, the content and format are difficult to work with. Often, MDAs and GSS do not capture spatial related data, and those who try to capture spatial data have challenges with technical quality. Most of the MDAs have weak analytical capacities in relation to spatial data. Information collection is usually not standardized with each institution having its own format and style. Another major problem confronting spatial data especially on spatial environmental data is lack of coordination among different institutions and duplication.

The way forward in his view is the introduction of spatial data in all data collection exercise by the GSS. GSS should determine district, city and town codes to be used by all MDAs and MMDAs in the country. Officials working at the statistical departments of the various institutions should be trained on how to routinely collect data especially, spatial data. Provisions should be made for adequate funding for data collection in the country.

Discussion

Speaker	Comments
Christine Asare, EPA	Emphasized the need to identify all spatial data producing organizations in the country and collaborate in various ways to avoid duplication of work. She called for the creation of a robust data management system as part of the collaboration to ensure that all the scattered spatial data are harmonized. She noted the diverse methodologies in spatial data production and recommended harmonization to ensure comparability of data among producers.
Foster Mensah, CERSGIS	Proposed the creation of spatial data infrastructure to harmonize all datasets and a policy framework to manage spatial data in the country. He argued that data infrastructure and policy framework would ensure harmonization and comparability of environmental data required to monitor the SDGs in the country. Foster Mensah indicated the engagement of NASA to help strengthen information satellite imagery on slum dwelling, land cover and use in the country.
Kofi Amedzro	Reiterated the lack of spatial data in the country as a result of weak analytical capacity, weak information management system, use of different standards and methodologies by spatial data producers and the need for data producers to collaborate to overcome the challenges.
Professor Alex Asase, a lecturer of the University of Ghana	Said it was long overdue to have data on sources of animal and plant species in the country given the economic and social impact
Global Partnership for Sustainable Development Data	Stressed the need for expertise support to harmonize spatial data in the country to monitor the SDGs. He called for the collaboration of institutions involved in spatial data production.

Eric Kumah Baffour, Ghana Open Data Initiative	Suggested that all spatial data should be on one platform.
Kofi Asare, CERSGIS	Emphasized the need to have disaggregated data on climate for the entire country to help meet the SDG targets.
UN Geospatial Data	Called for the building of consensus to have core spatial datasets platform in the country.
Omar Seidu of the Ghana Statistical Service	Said the time has come for GSS to go beyond the current parameters of preparing enumeration area maps for population census in order to meet needs of other users.
Professor Samuel Nii Ardey Cudjoe, Regional Institute for Population Studies (RIPS)	Called on all producers and users of spatial data to come together and share information, capacity and resources.

3.4 Parallel Session C: Tools for data communication, advocacy, evidence-based decision-making and accountability

Moderator: Mr. David Kombat, Director of Communications and Dissemination, Ghana Statistical Service

Panelists:

- Mark Irurua: Development Gateway
- Alexandra Silfverstolpe: Data Act Lab
- Ernie Ofori: AITI-KACE
- Andrew Aidoo: ESRI

Summary

Quality data production is key to ensuring success in achieving the SDGs. However, in order to ensure that the data produced can be used to inform advocacy and decision-making and accountability, it is necessary to devise new ways to map and communicate data. In recent years, there has been much advancement in this area and many tools now exist which can help to better communicate and disseminate data to target and wider audiences.

Presentation 1: Mark Irurua: Development Gateway

The first panelist, Mr. Mark Irura of Development Gateway made a brief presentation entitled "Tools for Better Communication". He began by noting that there exist huge challenges in data dissemination for a number of reasons:

- There is sometimes a disconnection between data, their usefulness, and usage. i.e. data is not captured in good time for relevant purposes (i.e. timeliness and relevance of data);
- Generally, tools used for capturing data may not be adequate or effective;
- The personnel capturing the data may not fully understand the big picture relating to the data captured, resulting in some data not being meaningful to support evidenced-based decision-making;

Mr. Irura indicated that there are essential tools available for capturing data effectively and cited the example of Malawi where the Aid Management Platform was launched and is being managed by the Ministry of Finance & Economic Planning. This is the Government of Malawi's official source of statistics and data about foreign aid spending.

The presenter further cited Open Schools Kenya as a vital tool for providing better facilities for schools. For example, it has led to the provision of the first "living" datasets (after a long time) about education (school location, fees, class size, or building types, # of students/teachers, sanitation and health facilities), combining citizen-sourced and government data about schools in Kibra (Nairobi).

Mr. Irura concluded by making the following recommendations:

- Data collecting organisations ought to stimulate demand for data through easy-to-use tools;

- Data collecting organisations should endeavour to highlight data gaps with the appropriate visual illustrations;
- Training and capacity building is fundamental because it will equip local-level data users with the skills to interpret, analyse and apply data analysis results in their work.

Presentation 2: Alexandra Silfverstolpe: Data Act Lab

The second panelist, Ms. Alexandra Silfverstolpe of Data Act Lab made a brief presentation entitled "Country Owned Digital Portals for Informed Policy Choices and Action". She began by noting the great challenge facing the 193 countries who have committed to Agenda 2030 + AAAA (Financing for Development) to determine how they can quickly get up to speed and utilize data in effective decision-making.

According to Ms. Silfverstolpe, this challenge demands data for action. As a result, data should be more meaningful. Ms. Silfverstolpe cited Country Owned SDG Portals as a tool very useful for analysis, informed policy choice and action. It also gives an opportunity for all major stakeholders to be effectively networked. In this regard, the Country Owned SDG Portals are very helpful in tracking the SDGs progress, data gaps, etc. Colombia has already implemented this tool which is to be launched sometime in April 2017.

Presentation 3: Ernie Ofori: AITI-KACE

The third panelist, Mr. Ernie Ofori of AITI-KACE made a brief presentation on the Savannah Accelerated Development Authority (SADA) entitled "A Data Driven Approach for Sustainable Development". The objective of the presentation was to discuss lessons that can be learned from the SADA experience.

Mr. Ofori shared the vision and mission of SADA in improving the three northern regions within the shortest possible time and noted that data is very foundational/fundamental for helping to achieve the objectives of SADA.

Mr. Ofori noted that SADA relies on a number of economic models and processes to achieve its objectives. These in turn rely on modeling tools and systems which are reliant upon quality data. Some of these tools are:

- Solution Architecture (a business application architecture comprising of an Investment Portal, Economic Modeling, and ERP - Enterprise Resource Planning)
- Enterprise Architecture (Holistic Information Technology)

However, Mr. Ofori noted several challenges that need to be addressed such as:

- Data Standards Body
- Data Specification
- Interoperability
- Technical Committees
- Data Infrastructure (Data Centres, Local Clouds & Connectivity)

- API Integration (Data Exchange, Data Validation & Master Source)

Presentation 4: Andrew Aidoo: ESRI

The fourth and final panelist, Mr. Andrew Aidoo of ESRI, made a brief presentation on using GIS to enhance relevant and timely data collection. He stated that ArcGIS, an internet based tool, can be highly useful in this endeavour.

3.5 Parallel Session D: Producing sex-disaggregated and gender-sensitive data

Moderator: Dede Bebu-Addo: Ghana Monitoring and Evaluation Forum

Panelists:

- Alba Bautista: Data 2X
- Andy Tatem: Flowminder
- Professor Samuel Annim: University of Cape Coat

Summary

Alongside the standalone goal for gender equality in the SDGs, goal 5, *Achieve gender equality and empower all women and girls,* and the call to Leave No One Behind means that gender must also be considered in every thematic area across all the 17 goals. This session focused on the need to produce data that is both sex-disaggregated and gender sensitive, i.e. data that reflects the gendered nature of society and the different experiences of women and men, boys and girls, for the entire indicator framework. It highlighted areas where data already exist to produce gender indicators and proposed solutions to key data gaps.

Presentation 1: Alba Bautista: Data 2X

Alba Bautista in her presentation said, Data 2X is a collaborative technical and advocacy platform dedicated to improving the quality, availability and use of gender data to make a practical difference in the lives of women and girls worldwide.

The main focus of Data 2X includes:

- Women's Work and Employment
- Women's Financial Inclusion Data
- Big Data and Gender
- Data on Displaced Populations

The presentation covered what gender data is, the problems associated with gender data including; Society norms and values, biases, incomplete or missing data.

Also, the presentation covered the current work been done by Data 2X, which includes; mapping gender data gaps, partnership with Open Data Watch to identify a set of 20 ready to measure indicators across 8 SDGs targets that can be measured and also addressing sources of gender bias in data.

Presentation 2: Andy Tatem: Flowminder

Mr. Andy Tatem explained that Flowminder was concerned with high resolution mapping of female welfare through data integration. Flowminder works in collaboration with other partners to produce gender sensitive data through:

- Data integration

- Spatial demography (using gridded demographic data)
- Building expertise through training.

It also uses mobile technology and has some work with Vodafone foundation that they would be interested in expanding in Ghana. Challenges include weak national and administrative data.

Presentation 3: Professor Samuel Annim: University of Cape Coat

The focus of Prof. Annim's presentation was on the following questions:

- Who is generating gender data in Ghana?
- Who is synchronizing gender data in Ghana?
- Who is putting gender data to use in Ghana?
- Who is tracking the expected impact of gender data in Ghana?

The above points are general questions regarding the production of high quality gender data in the country and point to a critical issue: that gender data is not currently being championed by an institution and therefore is both under produced and underutilized. There is therefore many gaps in both gender-disaggregated and gender-sensitive data that need to be filled in order to produce positive development outcomes for all citizens.

Critical issues that were raised include:

- Scope of data- in what areas are we considering producing gender data? We should be concerned about gender differences in all thematic areas.
- How are we accounting for cultural factors in our modes of collecting gender data? For example, in communities where it is difficult to access women, are they being occluded by our data collection practices? Moreover, we need to be sure that our sampling methodologies, definitions, metadata, and question formations do not carry unintended gender bias.
- We should consider supplementing quantitative data with qualitative to get a fuller picture of gendered experiences.
- It is essential to ensure that data is structured in such a way as to be accessible to researchers and policy-makers in this area.
- The type of gender statistics and analysis is produced and disseminated must reflect current debates and issues in Ghanaian society.

Some areas for analysis that were suggested in Prof. Annim's presentation included:

- Pursuing a qualitative understanding of the interaction between males and females
- Ensuring that focus on gender statistics is not only on women/ femininity but also on understanding masculinity
- A possible further area of study may be the distinction between access and control of resources (between males and females)

Discussion

The discussion which followed the presentations raised the following issues:

- Need to make the distinction between gender disaggregated data and gender sensitive data and improve the production of both;
- The National Statistical System must promote the actual use of gender data particularly among policy-makers to make its collection more relevant;
- It is also necessary to address the cultural and social factors that affect the collection of gender data;
- Many civil society organisations are doing work around gender data and gender equality. The data ecosystem must explore partnerships with civil society and other partners to bridge the gaps in Gender Data;
- There is also a need for more education tools, training, research and promotion/advocacy on collection and use of Gender Data in a standardized format for both data producers and data users;
- There must be a strategic effort to build on political will at all levels -central government and heads of MDAs, to promote collection and use of gender data for national development and meeting the SDGs, and for adequate resource provision for research and collection of Gender Data.

3.6   Session 8: Open Data for SDGs in Ghana

Moderator: Eric Akumiah, National Information Technology Agency

Panelists

- Eric Swanson, Open Data Watch
- Tom Orrell, Publish What You Fund
- Audrey Ariss, Centre for Open Data Enterprise
- Fiona Smith, The Open Data Institute

Summary

Ghana began its Open Data Initiative in 2012 and like many other countries is still in the process of integrating this into its data ecosystem. This session looked at why further pursuit of Open Data is important for Ghana and what the benefits can be for data producers and users from many stakeholder groups and the enabling conditions that need to be put in place to allow Open Data to thrive in the country.

The moderator set the tone by defining Open Data as data that is freely useable and can be distributed. He emphasized the point that for data to be Open, the data must be legally free, meaning there should be an open license and have the necessary framework that makes it free. It must also be technically free (machine readable). The moderator called on the panelists to address the question of how data can be used as Open Data to achieve the SGDs.

This session highlighted that there is a need in the country for demand-driven open data and an understanding that openness is not in conflict with profit or other drivers. Steps to building an open data ecosystem in Ghana were outlined as follows:

- Inventory of the data that exists outside the NSO, bring the ecosystem together and making it available – draw on different perspectives to build the ecosystem approach (tech, legal, policy, etc.)
- Publish data – need not come into a central portal
- Roadmap is a key opportunity

It was also noted that there is a lack of investment in open data generally by African governments but that much of the work could be done without large financial outlays. It was important in this respect to build awareness and understanding amongst policy-makers of value and opportunities that open data offers.

Presentation 1: Eric Swanson, Open Data Watch

Beginning the discussion, Eric Swanson from Open Data Watch defined Open Data as digital data that is made available with the technical and legal characteristics necessary for it to be freely used, reused, and redistributed by anyone, anytime, anywhere. He emphasized the point that Open Data will improve governance, citizen engagements, inclusive development and innovation. He called for many types of data to be open including mapping data, meteorological data, etc. and all official statistics.

Ghana scored 27 in Open Data Inventory (ODIN) assessment in coverage and openness of official statistics with strength in Social and Economic statistics as well as non-propriety file format. However, the country is weak in the area of non-availability of Environmental statistics, data mostly in PDF format and no Term of use.

Mr. Swanson concluded by suggesting that:

- Given political support and legal authority, National Statistical Offices should make their data open by publishing terms of use and making the data available in non-proprietary, machine-readable formats
- increase the capacity to produce full range of data expected by users, and
- National statistical systems should be the vanguard of the open data movement: that will require innovative methods, human and financial resources, and strong leadership.

Presentation 2: Tom Orrell, Publish What You Fund

Tom Orrell, Publish What You Fund, explored the concept of Openness as being crucial to governments' approach to the SDGs and Openness as key enabler in the context of interoperability on a broad scale from different data sources without losing the meaning of the data and integrate that data into mapping, visualization and analysis. He noted that interoperability is more realistic and useful information to help drive analysis, decision-making and accountability.

He called on Ghana to consider how the principles of open data and interoperability could be integrated into the National Strategy for the Development of Statistics and other national guidance.

Presentation 3: Audrey Ariss, Centre for Open Data Enterprise

Audrey Ariss of Centre for Open Data, reflected on the economic value of Open Data which has been estimated to be US$3-5 trillion annually.

She noted that Open Data has traditionally being focused and driven by supply and not demand driven. There is therefore, the need to shift to a more user-centred open data approach; prioritizing demand, creating data catalogues, identifying high value data, developing iterative cycles for feedback, and building collaborations for data, skills, infrastructure, and awareness.

Presentation 4: Fiona Smith, The Open Data Institute

Fiona Smith, Open Data Institute, underscored the importance of Open Data for monitoring SDG implementation, widely encouraging development, erasing the digital divide, and encouraging growth of business and innovation.

She likened data to helping navigate to a decision, to roads which help to navigate to a location. Understanding data in this way, will help visualise the importance of data infrastructure. She concluded by stating that data Infrastructure is not just the system itself; it's about building capacity of the people

who use the system. She noted that it is only when people can make full use of the data infrastructure will open data initiatives be able to gain the full impact of open data.

Discussion

Questions from the floor

- What does the panel think of the data ecosystem approach to open data in Ghana
- What are the opportunities, potentials and barriers of open data in SDG implementation
- How can Ghana improve on its ranking on ODIN?

Eric Swanson noted that there are lots of data on the official Ghana Statistical Service (GSS) website, however there is the need to make the data more accessible and easier for data users. GSS could equally create links to other data websites.

On the question of opportunities for Ghana on Open Data initiative, Tom Orrell noted that Ghana can take advantage of Open data being on the agenda of UN Statistical Commission this year and in collaboration with Global Partnership for Sustainable Development Data. Audrey Ariss echoed the need for prioritizing data for SDGs, building strong institutional and legal framework.

The moderator concluded the session by making a presentation on the works of National Information Technology Agency (NITA), Open Data Initiative which was started in 2012. The initial challenge was with executive buy-in but that has being overcome with the Ministry of Communications developing a Data for Development Programme. He said the team was currently working on the legal and policy framework to improve open data and building capacity in agriculture, energy, education and health statistics with GSS.

3.7　Session 9: Policy and enabling environment

Moderator: Gladys Ghartey, Ministry of Finance

Panelists

- Teki Akuetteh Falconer: Executive Director, Data Protection Commission (Key presenter)
- Sylvester Gyamfi: Director of Co-ordination and Programme Management, Ghana Statistical Service

Summary

This session highlighted the necessary policy initiatives in relation to data production, sharing and use, as well as the enabling environment needed to ensure data quality, interoperability, security and protection.

In particular, it was outlined that any new statistics law must have guidelines for coordination and a clear framework for implementation. The discussion highlighted concerns that publishing data would infringe on personal privacy but equally there was frustration expressed that getting access to even the most basic information was difficult.

Presentation 1: Teki Akuetteh Falconer: Executive Director, Data Protection Commission

Teki Akuetteh Falconer, Executive Director, Data Protection Commission, reminded all stakeholders that information/data collected should be adequately protected. Data protection according to her, is the legal process of safeguarding personal data through the establishment of controls of access and use of such information. Ms. Akuetteh emphasized that there is the need for effective data management since it helps saves time and resources in the long run and prevents duplication of effort by enabling others to use data already available.

In conclusion, Teki Akuetteh remarked that the implementation of the Data Protection Law, standards and policies can enhance the development, capacity and use of data towards the attainment of the SDGs. Data protection, she observed is the key to the trust needed in the production of accurate data needed for sustainable development

Presentation 2: Sylvester Gyamfi: Director of Co-ordination and Programme Management, Ghana Statistical Service

Sylvester Gyamfi, Director of Coordination and Programme Management of the GSS, said to ensure effective functioning of the National Statistical System (NSS), the Statistical Service Law (PNDC Law 135) has been reviewed to address current weaknesses within the NSS. As a result of the review, the GSS in collaboration with relevant stakeholders has drafted the Statistics Bill which enjoins the GSS to coordinate statistical activities pertaining to the NSS. Thematic areas for statistics production have been increased in the Bill to address issues of proliferation of statistics in the country. The Bill makes provision for the creation of National Advisory Committee of Producers and Users of Statistics (NACPUS) which provides the needed platform for addressing issues of common interest in statistics production in the country. The

GSS efforts of ensuring that the Statistics Bill is passed could not materialize as the last Parliament could not pass the Bill before it was dissolved in December 2016. As a result, the GSS has written to the Attorney-General and Minister for Justice for advice on the current state of the Statistics Bill and the way forward.

Sylvester Gyamfi said the GSS places much importance on the confidentiality clause in the Statistical Bill.

The GSS adopted a national statistical framework (National Strategy for the Development of Statistics captioned "Ghana Statistics Development Plan: 2009-2013) in 2008 with ten Ministries, Departments and Agencies (MDAs) as part of the measures to strengthen statistics production in the country. The NSDS II (2017-2021) was developed and increased the number of MDAs from ten to sixteen for implementation. Ghana signed the African Charter on Statistics in 2009 to be committed to the international principles of official statistics. The African Charter was ratified by Ghana in 2016 to become the 19th African country to ratify the Charter. The GSS was part of a peer review mechanism in 2008 and 2012 where members of sister African Statistics Offices peer reviewed GSS operations and products as part of the GSS reform agenda. Sylvester Gyamfi noted that the GSS has continued over the years to have political support for statistical production, while upholding the principle of non-political interference in its operations.

Discussion

Speaker	Comments
Eric Ocran, UNFPA	Expressed concern about drawing a line between data protection and public interest in the country by ensuring that any data that is required to be confidential remains so. He also suggested that CSOs be represented on GSS Board.
Sylvester Gyamfi, GSS	Responded that the composition of the GSS Governing Board in the Statistics Bill includes the private sector. However, the suggestion for inclusion of civil society on the GSS Board was noted.
Kennedy Adjo Kumah, Trade Union Congress	Commented on difficulty in accessing data due to attitude of officials which has to be addressed.
Sylvester Gyamfi, GSS	Responded that in the case of GSS data requests normally delay when people do not know what they really need and have to be called to explain before their real needs are met. The GSS has set up a Resource and Data Centre to facilitate data requests from clients.
Olivia Opoku Adomah, Director of Research, Statistics and Information of the Ministry of Tourism, Culture and Creative Arts	Asked where the Local Government Service Secretariat (LGSS) has reached with the plan of establishing Statistics Departments/Units in the MMDAs (Metropolitan, Municipal and District Assemblies)
Sylvester Gyamfi, GSS	Responded that the plan of having a Statistics Department in each of the 216 MMDAs in the country falls within the government decentralization policy. The GSS in collaboration with the LGSS developed relevant documents (operational manual, scheme of service, and staffing norms) for operationalization of the statistics departments in the MMDAs. An initial 28 GSS staff were posted to work in the statistics department. It is expected that

	as time goes on the LGSS will recruit more staff with the requisite background to work in the statistics departments to ensure that the districts statistics needs are met.
Dorothy Gordon (Formerly AITI-KACE)	asked whether GSS was operating within the requirements of the e-Government Interoperability Framework?
Sylvester Gyamfi, GSS	Said all its publications are posted on its website (statsghana.gov.gh). The website is also linked to websites of other MDAs in the country. GSS collaborates with the National Information Technology Agency (NITA) on data security and other ICT issues.
Teki Akuetteh Falconer of Data Protection Commission	Explained that the relationship between her commission and NITA is mainly collaboration. What Ghana needs to do presently is to streamline its policy on open data. She expressed the need to ensure a balance between accesses to information and ensuring that rights of people are not abused. She assured participants that the Data Protection Commission would soon launch compliance framework policy on release of data or information.
Sylvester Gyamfi, GSS	GSS in designing census and survey instruments (questionnaires and manuals) engages with stakeholders for inputs into the instruments on thematic areas related to their operations. As part of this engagement, survey and census advisory and technical committees are made up of personnel with the needed expertise to guide the implementation process.
Gladys Ghartey, Ministry of Finance	Urged GSS to collect data to meet the statistics needs of the country at all levels and ensure effective dissemination and use of data

3.8   Session 10: The roadmap forward- key priorities, opportunities and commitments for Ghana

Participants were asked to break into 4 groups and determine priorities for moving the data roadmap forward around assigned thematic areas.

3.8.1   Group 1: Administrative data and data disaggregation
- Data collection, processing, and storage at the District Level must be addressed to ensure that data can be disaggregated by location;
- Data collection templates must be reviewed to ensure that all relevant sub-populations are captured;
- MDAs should be supported to digitize data collection, processing, and storage;
- Data interoperability between government MDAs, private sector organisations, CSOs etc. should be strengthened;
- Statistics Bill should have language ensuring that all MDAs are compelled to report administrative data to GSS which should be considered the coordinating body for statistics in the country;
- Central government budgets must allocate resources for administrative data collection which can be complemented by development partners.

3.8.2   Group 2: Policy and enabling environment
- The need to obtain buy-in from CSOs and other stakeholders for the new Statistics Bill and ensure the inclusion of issues discussed in the forum;
- To ensure the regular and timely transmission of data by MDAs to GSS, there is the need to develop MoUs between the institutions;
- There is the need for a Data Quality Assessment Framework to guide the assessment of data produced within the National Statistical System.

3.8.3   Group 3: Strategies for encouraging data accessibility and use
- Need to create standards and regulations to encourage multi-sectoral and institutional collaboration;
- Create a hub which directs users to easily accessible data;
- Strong political commitment to data accessibility and use by allocating budget to fulfil the roadmap objectives;
- It is necessary to find more agile ways that lower cost to facilitate collaboration among stakeholders;
- Ensure that data production is user driven;

- Strengthen statistical and planning units of MDAs and MMDAs and build capacity in collection, analysis and the use of data;
- Strengthen the political will and commitment to ensure financing of Sustainable Development Goals initiative from the regional to the local levels. Hence, the need to sensitize the political leadership on the importance of appointee of Metropolitan, Municipal, and District Chief Executives (MMDCEs) and District Chief Executives (DCEs) who are statistically literate and understand the importance of using data to inform decision making;
- Strengthen the National Statistical System (NSS) to achieve its objectives and to help accomplish the Sustainable Development Goals.
- Ensure that the GSS moves from descriptive reports to more informed advanced analytical reports to establish trends to inform decision making;
- The GSS needs to come up with technology driven tools to aid users in accessing and using data;
- GSS should build and strengthen the capacity of policy makers on data analysis, interpretation, report writing skills and data communication to inform policy making.

3.8.4   Group 4: Data ecosystem and partnerships

- Ensure that the Data Roadmap Advisory Committee (DRAC) is sustainable;
- Passing the Right to Information Bill into law would support Open Data and transparency;
- Data Sharing agreements should be put in place across government, and be made possible with the private sector;
- Data standards and guidelines should be put in place to ensure interoperability;
- Data communities (sector-specific and cross-cutting) should be put in place to begin solving capacity issues and filling data gaps;
- Data should be released in formats that are easily reusable.

3.9   Forum closing remarks

Dr. Claire Melamed, in her closing remarks expressed how delighted she was and extended her warm appreciation to the GSS team in particular and all who worked tirelessly in organizing the forum. Dr. Melamed urged all stakeholders to sustain the momentum of the two-day forum and called for more effective coordination and data sharing among stakeholders. There was clear momentum for change throughout the workshop which could be connected to the larger movement for change known as the Data Revolution.

The Acting Government Statistician drew the attention of participants to the fact that key among the issues deliberated on during the two-day forum was the need for adequate and effective coordination among all stakeholders. He also affirmed that the Statistics Bill which is being currently considered by Cabinet would be revised in light of the outcomes of the forum.

In conclusion, the Acting Government Statistician affirmed the commitment of the GSS to immediately initiate action on the outcomes of the forum. He then thanked all the personnel who had worked to make

the forum successful. In the absence of any further issue, the Acting Government Statistician declared the forum duly ended.

4 Priority areas for action: Recommendations for next steps

While this forum addressed a number of topics over 2 days, the following recommendations for next steps can be made around the priority areas defined under each of the 3 themes.

4.1 Addressing data gaps

As outlined in the executive summary there are a number of priority areas for action required to address current data gaps.

- Build the administrative data system
  - Engage with Ministers and Directors of MDAs and MMDAs to chart a way forward on administrative data which can be included in their medium-term development plans to enable data disaggregation and coverage of new thematic areas and harmonization for key indicators; identify how sector based development partner support can be used to enhance these efforts.
  - GSS to share data standards and definitions of key concepts to ensure uniform use across the National Statistical System.
  - Conduct a review and update process of templates used by MDAs & MMDAs to collect administrative data which will be used to produce SDG indicators. These templates will be checked to ensure that resulting data can be used to produce disaggregated indicators (e.g. by sex), that adequate metadata is in place to support statistics production, and that standard concepts and definitions are being applied to enable interoperability;
  - Build a statistically powerful National Identification System with strong links to Civil Registration and Vital Statistics; ensure interoperability and cross-checks where possible with other national databases such as electoral register, national household registry, etc.;
  - NITA/GSS to share data and metadata standards to ensure interoperability of databases and surveys (see action items under "Strengthening Censuses and Surveys" below). Continue the engagement with MDA IT departments to determine optimum ways to connect databases and support interoperability;
  - Adequately resource staff training from national budget, and ensure that training is included in MDA and MMDA budgets, to enable GSS to share its technical expertise;
  - Establish strategic partnerships, starting with a partnership with Statistics Denmark to provide technical assistance on the creation of administrative registers, e.g. for the Labour Market, Education system etc.
  - Make available data and reports in open data formats and in a timely fashion.

- Strengthen censuses and surveys
  - Critically review the relevance of questions included and rationalize the suite of censuses

& surveys being conducted where possible to save cost and provide more timely data;

- o Ensure that censuses and surveys collect new types of information where appropriated such as GPS coordinates, phone numbers for follow up surveys etc.;
- o Explore the use of new technology to aid data collection, processing, and storage;
- o Ensure standardization of concepts to allow for interoperability;
- o Improve metadata records attached to census and survey datasets;
- o GSS to provide a national master sampling frame and provide guidance on sampling methodology for thematic surveys.

- ● Pioneer uses of new types of data
    - o Identify thematic areas/ data gaps which new types of data could be used to close;
    - o Pursue projects in particular utilizing mobile phone records and earth observation data;
    - o Carefully document and make available methodology to inform similar work in other contexts.

4.2 Encouraging data use

To make the entire data cycle more responsive to user needs, there must be better communication between producers and users, data must be more available in formats and in ways that allow users to ask and answer new and innovative questions.

- ● Creating an iterative feedback loop between producers and users
    - o GSS and MDAs to make stakeholders aware of when and the format for consultation on data collection exercises;
    - o Establish multi-stakeholder working groups focused on thematic and cross-cutting issues under the Roadmap Advisory Committee to move forward the initiatives suggested during the Forum, e.g. focus on gender statistics, focus on spatial data etc.;
    - o Online data communities should be established (both sector-specific and cross-cutting) to allow for sharing of information and ideas and to encourage collaboration and partnerships on specific areas of work.

- ● Make data more available , facilitate coordination and cooperation
    - o Create an indicator tracking platform at GSS which links to data around the National Statistical System and beyond to report on indicators and drive development outcomes for national, continental, and global development agendas and enhance data dissemination and communication;
    - o Accelerate work towards Open Data with initial focus on releasing data in a format which can be easily reused (e.g. CSV files in addition to PDF) and putting an Open Data Licence in place;
    - o Present data in a way that is easy to understand using techniques such as data visualization where appropriate, and telling data stories that connect with users interests.

- Provide training in key areas
    - o Upskill data producers to be able to release Open Data and interact with decision-making cycles;
    - o Upskill key data users to ensure that they can find data, and translate it into evidence for decision-making;
    - o Train staff involved in new data collection, processing or analysis methods to ensure retention of skills;
    - o Train staff in district statistics departments to carry out their duties.

- Demonstrate the potential of data to achieve development outcomes
    - o Building on the data interoperability work described under the "Addressing Data Gaps" theme, demonstrate through concrete projects the power of interoperable data;
    - o Focus efforts on improving service delivery and development of products that serve the most vulnerable in our community;
    - o Publish case studies on how this data has been used;
    - o Reach out to potential partners to find innovative ways to use data for development outcomes.

4.3   Strengthening the data ecosystem

Data ecosystems are complex and comprised of many moving parts. Their functioning requires an entirely new approach, with all stakeholders moving towards collaboration and coordination, within a supportive policy environment, and with sufficient resources to carry out their work. For data ecosystems to gain and maintain legitimacy with and cooperation from data providers moreover, it is necessary to communicate effectively the benefits to the entire citizenry.

- Move towards coordination and collaboration and the establishment of strategic partnerships
    - o Memoranda of Understanding to be established between MDAs on data sharing and statistics production;
    - o GSS to be positioned as the central coordinating body for official statistics production and standard-setting in the country and as a cornerstone of the data ecosystem;
    - o The advisory committee established to oversee the work of the Data Roadmap Forum and implementation of outcomes should be resourced to ensure sustainability;
    - o The Roadmap Advisory Committee will encourage and enable collaborations in particular areas through its working groups;
    - o Government to establish strategic partnerships with other stakeholders (private sector; academia; CSOs; media; development partners; international partners) in order to produce new types of data from new technologies and effective data production and use;
    - o Partnerships with other national, regional and global organisations such as the Global Partnership for Sustainable Development Data are also crucial to stay connected to best

practice. Ghana should position itself as a key partner for other countries as well on SDG data issues including those going through the data roadmap process and continue to be a continental leader with regard to data production for sustainable development.

- Create a harmonized policy and enabling environment
  - o Policy audit/review to identify gaps, synergies and interlinkages between relevant policies and strategies across the data ecosystem environment – data production, protection, capacities, etc.
  - o Statistics Bill to be revised through a consultation process to reflect current environment, and subsequently passed into law without delay;
  - o Right to Information Bill to be passed into law;
  - o Review of data protection guidelines to ensure that Open Data is promoted;
  - o Open Data licence to be put in place across all open government data;
  - o Build and implement a Data Quality Assurance Framework (DQAF) to all for the integration of different sources of data into official statistics.

- Sustainably resource the data ecosystem
  - o Government must prioritise statistical production and resource it accordingly, both financially and in terms of building human capacity;
  - o Development Partners should support strategic initiatives either by providing technical assistance or financial support;
  - o New partnerships with private entities should be pursued where appropriate.

- Communications and Sensitisation
  - o Be more proactive in sensitizing data providers to the importance of data collection activities;
  - o Provide feedback to data providers on how their data has been used;
  - o Raise the profile of statistical activity in general through regular newspaper columns, radio interviews, TV coverage;
  - o Explore use of social media to communicate with stakeholders and wider population.

5 Appendices

5.1 Appendix 1: Transcript of Welcome Remarks given by Mr. Baah Wadieh, Acting Government Statistician

Your Excellency, Dr. Mahamudu Bawumia, the Vice President of the Republic of Ghana

Your Excellency Ms. Susan Namondo Ngongi, UN Resident Coordinator Ad Interim

Your Excellencies Members of the Diplomatic Corps

Honourable Minister for Finance

Honourable Minister for Planning

Honourable Minister for Monitoring and Evaluation

Honourable Members of Parliament

Heads of the various United Nations Organisations in Ghana

Our Development Partners

Executive Director of the Global Partnership for Sustainable Development Data

Local and International Panelists

Distinguished Invited Guests

Members of the Press

Ladies and gentlemen

As Acting Government Statistician, I am honoured to welcome you all to Ghana's Data for Sustainable Development Roadmap Forum.

This Forum takes place at a time of considerable change and excitement for the global data community. Over the next 2 days, you will hear much about the Sustainable Development Goals, (the SDGs), which lay out a vision for the world in 2030 and signpost the journey that we must go on together in order to make that vision a reality.

Alongside the SDGs, Ghana has also committed to various continental strategies such as AU Agenda 2063, and of course also has its own national development plans. Realising these aspirations for Ghana, the African continent and the world, will necessitate new types of data on new topics and themes, and demands for more detailed information than ever before.

In our most recent National Strategy for the Development of Statistics, which came into operation in January of this year, Ghana's National Statistical System has committed to producing accurate, relevant, reliable and timely statistics to meet these increased and varied user needs. Crucially however, the NSDS

also recognizes that the National Statistical System itself is constituted by a wider membership than government ministries, departments and agencies alone. The stakeholder groups represented here today play vital roles in both the production and the use of data and statistics in Ghana. In order to meet the considerably increased data needs of the country and to harness the opportunities presented by the substantial growth in the amount and type of data available as well as new technologies for data collection, processing, sharing and dissemination, we will all need to work together to create a harmonious data ecosystem.

While the data-driven SDGs certainly present a challenge therefore, they also afford an opportunity for data ecosystems to grow and evolve in order to meet current and future needs. It is also important to remember that Ghana is not alone in this endeavor. Around the world, statistical actors are finding ways to work together, adopting innovative technologies, and removing barriers to data sharing. In order to connect more systematically to this diverse experience and expertise, we are delighted to have recently joined the Global Partnership for Sustainable Development Data, a global multi-stakeholder network committed to harnessing the data revolution for sustainable development.

One way that the Global Partnership has sought to advance the efforts of its country members has been through supporting the organisation of National Data Roadmap Forums. The forums have been held in countries such as Senegal, Sierra Leone, Kenya, and Tanzania, as well as in the USA. We are thrilled that today, Ghana can be added to that list as we deliberate on the most effective ways to produce, share, and communicate the required data and statistics over the coming years.

I would like to take this opportunity to thank the Global Partnership for their support throughout the organisation of this forum, and for facilitating so many international experts in joining us here today. I have no doubt that your insights will be invaluable to shaping Ghana's data roadmap and I am so grateful that you have accepted our invitation to participate.

I would also like to thank the UNDP who, with advice from the UN Data Group, are also supporting the activities of the next 2 days.

On the advice of the other countries which have been through the data roadmap process, we also established earlier on a cross-governmental and multi-stakeholder advisory committee whose task is not only to advise on the organisation of the forum, but to oversee the implementation of the commitments made here over the lifetime of the Roadmap. I would like to thank the individuals who have dedicated a considerable amount of time and energy to this work particularly in the last month, and to their institutions for nominating these officers. I would also like to particularly acknowledge the support that the National Information Technology Agency (NITA) has given in providing connectivity for this activity.

Finally, I would like to acknowledge the members of my own team at Ghana Statistical Service who have contributed in many ways to organizing this forum.

You will hear from me again at various points over the next 2 days. Suffice it to say for now however, that I entreat you all to use this precious time that we have together to make new connections and strengthen old ones, to share your knowledge and learn from those around you, and to pursue innovative ideas to contribute to the data roadmap towards sustainable development in Ghana.

I now have the great pleasure of introducing Hon. Ken Ofori-Atta, Minister of Finance, to give the opening remarks.

5.2 Appendix 2: Opening Remarks, delivered on behalf of the Minister for Finance, Hon. Ken Ofori Atta

Your Excellency, Dr. Mahamudu Bawumia, the Vice President of the Republic of Ghana

Your Excellency Ms. Christine Evans-Klock, UN Resident Coordinator

Your Excellencies Members of the Diplomatic Corps

Honourable Minister for Planning

Honourable Minister for Monitoring and Evaluation

Honourable Members of Parliament

Heads of the various United Nations Organisations in Ghana

Our Development Partners

The Acting Government Statistician

Executive Director of the Global Partnership for Sustainable Development Data

Local and International Panelists

Distinguished Invited Guests

Members of the Press

Ladies and gentlemen,

It gives me great pleasure to open this Forum aimed at beginning the process of developing a roadmap for sustainable development data in Ghana.

As you are all aware, as the world reached the conclusion of the Millennium Development Goals, deliberations began on their successors culminating in the adoption of the Sustainable Development Goals, and their underpinning *Agenda 2030,* in September 2015. Ghana proved itself to be a critical player throughout the negotiations of the Goals and since their adoption has remained committed to their implementation and monitoring.

It is worth noting that Ghana was one of the initial 20 nations selected for national consultations on the theme, "*The World We Want"* for the post-2015 development agenda and played numerous other roles at global and continental levels throughout the process leading to the adoption of the SDGs. In recognition of the leadership and commitment exhibited by Ghana during this process our immediate past President was appointed by the UN Secretary General to co-chair the Group of Eminent Advocates for the SDGs.

The SDGs consist of 17 goals, 169 targets, and 230 indicators. The goals themselves reflect the participatory nature of the negotiation process, covering more thematic areas than the MDGs and prioritizing those which matter to all nations. First among them is a commitment to ending poverty and hunger, recognizing the human right of all our people to live in dignity and without want. Guaranteeing health and education are similar bedrocks of society, while working towards gender equality will ensure

that women and men, boys and girls enjoy a world of equal opportunities as well as outcomes. Clean water and energy, taking swift action against climate change, committing to responsible consumption, and honoring our duty to respect the balance of life on land and in the sea will help us to preserve our planet for future generations. As Minister for Finance, I am also particularly focused on goals relating to economic equality, innovation and infrastructure and building sustainable cities. Underpinning each of these goals is the commitment to peace and justice in all countries and a promise to work together to achieve the goals, and much more besides.

To ensure that Ghana remains committed to the implementation of the goals, an SDG Implementation Coordination Committee has been established and is led by the National Development Planning Commission (NDPC). This Committee has taken its que from the participatory manner in which the goals themselves were agreed and includes representatives from government Ministries, Departments and Agencies, the Ghana Statistical Service, Civil Society Organisations, the Private Sector, and Academia. The committee has been working over the last year to align the SDGs to national and regional development priorities and to galvanise action towards achievement of the goals and targets. You will hear more about this exciting work in our first panel session.

Alongside the 17 goals, at the global level the international community is developing a set of indicators for each country to report on. Ghana continues to play an active role in this process, led by the Ghana Statistical Service (GSS). Here at home, GSS has led a series of consultations to determine the current situation for the country with regard to SDG data production. Findings from these consultations will be shared with you during panel session 2, which will give an overview of the current situation, major challenges, and suggestions for ways to overcome them.

Further to this work internally in the country, GSS has been actively looking externally to find new ideas, innovations, and networks to help to meet the data challenge of the SDGs. In December 2016, Ghana became one of the first countries to join the Global Partnership for Sustainable Development Data, a global multi-stakeholder network committed to harnessing the data revolution for sustainable development. We are delighted to have the Global Partnership with us today supporting this Forum as well as the international experts they have facilitated in joining us.

One of the stated aims of this forum is to welcome new stakeholders into the conversation about data production and use. In that vein I am also delighted to welcome the development partners who work with us so closely here in Ghana, representatives from Civil Society Organisations, the private sector, academia and the media. Over the coming years, each of you will play a vital role in ensuring that not only is the right data produced to the highest possible standard, and in a timely manner, but also that it is disseminated, communicated, and utilized accordingly, and that our policy and regulatory environment continues to evolve to enable a modern data ecosystem to flourish. Political actors also have an important role to play in championing data use and, of course, resource allocation.

I wish you all fruitful deliberations over the coming 2 days. I am pleased to declare the Ghana Data Roadmap Forum officially open. Thank you.

5.3 Appendix 3: Keynote Address, delivered by the Vice-President, His Excellency Dr. Mahamudu Bawumia

Your Excellencies, Members of the Diplomatic Corps

Representative of the Honourable Minister of Finance

Heads of the various United Nations Organisations in Ghana

Our Development Partners

The Acting Government Statistician

Executive Director of the Global Partnership for Sustainable Development Data

Local and International Panelists

Distinguished Invited Guests

Members of the Press

Ladies and gentlemen,

It is an honour and a privilege to be asked to give an address on this very important occasion. I would like to take this opportunity to thank the Ghana Statistical Service, which is working in collaboration with the SDG Implementation Committee and the Global Partnership for Sustainable Development Data in putting this important conference together.

The post 2015 SDG agenda provides an unprecedented context for a collective global push to address development challenges. Fundamentally underpinning this context is a transformative element that combines sustainability, inclusiveness and financing, for the first time. The SDGs embrace a broad development vision and framework that is anchored on an ambitious agenda (17 SGDs) with large financial footprints.

In this regard, ladies and gentlemen, the adoption of the SDGs at the time of the Data revolution provides us with unparalleled opportunities to track implementation of these ambitious goals at every level of our society. Country-level commitments to the SDGs will not be feasible without fast-tracking the data revolution to provide the right information at the right time that is universally accessible to all. Ghana's attainment of its SDG goals will be critically underpinned by a robust data regime that is collectively supported by all partners, including the private sector, academia, NGOs, bilateral and multilateral institutions in a harmonized manner.

Ladies and gentlemen, at this critical juncture when the amount of data churned out on a daily basis is progressively increasing, with constantly evolving technologies for data collection, analysis and communication, it becomes our shared responsibility to galvanize towards harnessing this revolution for the betterment of our citizens. Whether you are a data producer or user, an innovator or policy-maker, each of you in this room today has a stake in the data revolution and have therefore been invited to contribute your unique skills and knowledge to this Forum.

Ladies and gentlemen, as the link between data and development is often misrepresented or poorly understood, I would like to reiterate the important synergies between the two. Broadly speaking, data is fundamental in showcasing our past successes vis-à-vis development, as well as the status quo; on the basis of which we can predict much needed future developments. Unfortunately, however, both data production and data use have thus far been limited; not reaching their full potential in Ghana and many other countries.

Unfortunately for statisticians and those who work in the collection of data, most governments do not really prioritise data collection and the political economy of that is very simple: the resources invested in data collection may not be very obvious to the average voter and so you may not see a focus on it. But governments forget that without the data, you will get your policies wrong. The data is what tells you where you are, and helps you get to where you want to get to. And then you will get the votes when you get there. It is really something that governments have to be reminded of, that investments in data and data collection, is key to development. If the data is poor, you are going to make poor decisions. This is why we need to remind ourselves about the importance of providing resources for data production, because of the synergies between data production and development.

The SDGs mark a watershed moment in the history of statistics – propelling and bringing statistics to the very core of development. Now, more than ever, statistics has moved from being a simple tool for progress monitoring and evaluation, to becoming a key driver of development programs that allows for more accurate targeting of interventions, development of new products and services, and better accountability among decision-makers. With increasing demand for more and better quality data, the SDGs require a step-change in the types, methods and actors involved in data production and use.

Ladies and gentlemen, to sufficiently respond to the call to *Leave No One Behind* on which Agenda 2030 is premised, data will have to become more disaggregated than ever before. Whereas in the past we (as Ghanaians) may have been satisfied with national or regional averages, we now seek information at district levels to adequately reflect the different realities and diversity of our beloved country. Similarly, we must produce more and better information on the lived realities of women and men, boys and girls to root out gender inequalities and begin to address structural discrimination that undermine women and men's progress in Ghana. Information on other marginalized groups should be systematically produced and used towards their advancement.

In the context of leaving no one behind and promoting inclusive growth in Ghana for example, the most recently passed budget specifically had programmes that targeted the poor and vulnerable groups in society. There is a programme of infrastructure for poverty eradication and development. The history of infrastructure spending has seen very little targeting towards poor communities. So we are going to take a portion of the existing capital expenditure envelope and allocate it directly to rural and deprived communities. That is the policy where we have put $1m for every constituency. In addition, we have an inner city development fund. But we need data ultimately to see what the impact of the targeting is, from the baseline to outcome. We need to do this to see what the impact of the investment has been, adjust if we need to adjust, and enhance if we need to enhance.

Alongside the challenge of disaggregation is that of producing data on thematic areas that have hitherto not been areas of focus for the official statistics community.

Ladies and gentlemen, the first theme of this Forum, "Addressing Data Gaps" will outline the challenges in more detail, while also exploring the quick wins, exciting innovations, and areas in need of long-term

commitment and investments to ensure that Ghana will fulfill its global reporting requirements as well as generate relevant data to improve Ghanaian lives.

Acknowledging that censuses/ surveys will continue to be the cornerstone of any solid data system, this theme will in particular emphasize the importance of building the administrative data system and ensuring harmonization and interoperability between databases. Ghana has recently made strides in this area. For example, through the implementation of a new Civil Registration and Vital Statistics Strategy and an ambitious National Identification Programme which together will be powerful tools to capture and record the most significant events in Ghanaians lives while enabling better public services simultaneously.

We in Ghana have decided that one of the major problems in terms of development, has been the largely informal nature of our economy. To modernize the economy, we need to formalize the economy. In that context, we have identified 3 main pillars of formalization which also help inclusion in the development process of those who have been largely outside. Making sure that everybody is identified, so this year we are issuing national identification cards to the population; where everybody lives is also identified, so we are implementing a digital addressing system this year so that we can identify every property and location, which will also help with the delivery of service targeted at a specific population. This is a major step forward for Ghana, to leapfrog over other countries and use digital mapping and be able to do an addressing system that will be far advanced of most developed countries. We will also enhance mobile interoperability with the banks to ensure that those people outside of the banking system are included. These three pillars are key to formalization and once formalization takes hold you can uniquely identify people, and know where they live, and with the resources that we want to use to tackle poverty you can use a delivery channel that is accessible across the country. Then you will be able to collect very valuable data.

So we are making some major changes as far as the formalization of our society is concerned, which is all consistent with the Sustainable Development Goals.

Of increasing importance too are new sources and types of data, which can be utilized in conjunction with traditional datasets to contribute additional layers of information and allow us to ask new questions about our society.

This brings me to the second theme "Encouraging Data Use". As I mentioned earlier, data is not only envisaged as a way to measure progress but rather to be used to drive progress itself. This can only be achieved when data producers and users engage in an iterative feedback loop, ensuring that data produced matches user needs. This refers not only to production of data but all other steps in the data cycle, ensuring that data is communicated and disseminated in a way that various users can easily comprehend, and in a format that allows the data to be used and re-used without restriction, i.e. Open Data. Once data producers have fulfilled these requirements, the onus will surely fall on decision-makers in all sectors to use this data.

Indeed, the tasks and opportunities that lay ahead are exciting and daunting in equal measure. The third theme of the Forum "Strengthening the Data Ecosystem" acknowledges that the traditional National Statistical System, comprising GSS and selected Ministries, Departments and Agencies, alone will not be able to produce all of the data required for the SDGs, and for other national and regional agendas to which Ghana is committed. Indeed, apart from data production, stakeholders represented here today will play key roles in encouraging the use of data, in creating policy, legislation, and regulation that facilitate data sharing, providing expertise in the use of new technologies and types of data, and in supporting through

resource allocation or in other ways the entire data ecosystem. Over the next 2 days, I would encourage you all to form new data communities either around particular thematic areas or cross-cutting issues so that we can continue to learn from one another and work together in the coming years.

As the Forum's title suggests, we are here to begin conversations around a National Data Roadmap for Sustainable Development. It is important to stress that this Roadmap is not a document that we will produce by the end of this week, month, or year. Rather it will be a living process that will continue to evolve until 2030 and will require ongoing concerted efforts from us all. I am particularly gratified to have with us representatives from other countries who can share experiences of their Roadmap processes. Alongside our international participants who have come to share their expertise with us, we will use the next 2 days to achieve the following:

1. Identify opportunities to align national development priorities and SDGs.
    2. Identify key data and technology gaps and potential new methods, sources of data and technologies to address them.
    3. Understand the data ecosystem in Ghana and foster the creation of sector-specific and cross-cutting data communities.
    4. Identify key issues on funding, resources, and capacity.

Ladies and gentlemen, we all appreciate the potential of data to drive the development of our country. I look forward to discussing over the coming two days, the most promising ways to unlock this potential to ensure that Ghana achieves its development priorities; making the vision of *The World We Want,* a reality.

Thanks for your attention, and I wish you all a fruitful deliberation.