



Papua New Guinea's First Data Stocktaking Workshop

5 - 6 September 2017, Lamana Hotel



National Statistical Office
Papua New Guinea



United Nations
PAPUA NEW GUINEA
Delivering as One



OVERVIEW

There is a plethora of data and corresponding sources of data for Papua New Guinea both in and outside the country. These relate to data from government, development partners, think-tanks, academia, private sector, and civil society organizations. However, in many cases these sources are not widely known or well disseminated. Implementing the Medium-Term Development Plan III (MTDP III) 2018-2022 requires a solid framework of indicators and statistical data to monitor progress, inform policy, and ensure accountability of all stakeholders. Encouraged by the localization of Sustainable Development Goals (SDGs) and learning from the experience of the Millennium Development Goals, taking stock of available data is critical to establish baselines and measure progress.

The **first national multi-sectoral data for development stocktaking workshop**, held on 5-6 September 2017 in Port Moresby, catalysed the discussion on data and established a network of data specialists. Over 120 data practitioners participated in this workshop convened by the Department of National Planning and Monitoring, the National Statistics Office (NSO), the United Nations, the University of Papua New Guinea / Australian National University, the World Bank and the Asian Development Bank. Together, workshop attendees initiated consultations regarding who is doing what in relation to data to support key national development priorities and plans, including the SDGs in PNG for the period (2017-2030). Through these discussions new possibilities for collaboration, innovation and improved coordination of development data in Papua New Guinea were identified.

This workshop report is a summary of the sessions reported against the three workshop objectives – **to identify data sources, to convene key partners and to agree to next steps.**

WORKSHOP OUTCOMES

The three objectives of the workshop of **convening** key data practitioners, **identifying** data gaps as well as **agreeing** on the next steps have been met as following:

The PNGData4Development Network which convenes Data Practitioners in Papua New Guinea has been established:

The **PNGData4Development Network** was borne out of the first Data Stocktaking Workshop, to better coordinate development data by identifying opportunities through partnerships. PNGData4Development Network members are passionate about good quality data and robust monitoring mechanisms. Under the leadership of the Government, all sectors are represented in the network, from private businesses, social enterprises, community organizations, academia and development partners.

A series of follow-up meetings are envisioned in the future. The United Nations will convene at least one meeting on each People, Planet, Peace and Prosperity by Sept 2018. The PNGData4Development Network will meet during the last quarter of 2018.

A preliminary data stocktaking has been undertaken, identifying data sources as well as gaps.

The list of data sources has been collated, which is a working document and will be updated on the PNGData4Development Website. Please reference Annex I for the initial list.

The next steps have been agreed as following:

All PNGData4Development Network members made **three commitments**:

1. Create a PNGData4Development **Website**;
2. Hold **at least one** meeting that is publicized on the website and is shared with the network by March 2018 and badge the meeting as 'a contribution to the PNGData4Development Network';
3. **Populate the PNGData4Development Website** with data sources and reports.

Participants also prioritized activities for the network to carry forward, including setting up a centralized open source database, build technical capacity, adopt modern technology, support NSO, draft a Statistical Governance Strategy and establish a convening body such as PNGData4development Network.

WORKSHOP SUMMARY

The Data Stocktaking Workshop paved the way for a series of forthcoming meetings regarding strengthening data for development in Papua New Guinea. The final workshop presentations can be found [here](#).

Welcoming Remarks

Ms. Christine Aisoli, First Assistant Secretary, Policy & Budget Division, Department of National Planning and Monitoring welcomed all stakeholders and provided an overview of the workshop objectives. Importantly, this presentation positioned the workshop in relation to the government reforms taking place in the country, including the alignment of the National Planning Act (2015) to the MTDP III 2018-2022 and Vision 2050, as well as the localisation process of the SDGs.

Mr. Roko Koloma, National Statistician, National Statistics Organization, encouraged participants to build from the lessons learned of monitoring the MDGs. The [Localizing the SDGs Success in Papua New Guinea report](#) captured available data sources and identified gaps against the 334 local SDG indicators¹. The Data Stocktaking workshop was the way forward to bring together stakeholders from all sectors to consolidate available data. This work, concurrently with the efforts to finalize and implement the Papua New Guinea National Strategy for the Development of Statistics, will lift the National Statistical System (PNGSDS) for the country.

Mr. Roy Trivedy, United Nations Resident Coordinator in Papua New Guinea, described the workshop as “Starting a Data Revolution” quoting from *Mismeasuring Our Lives* by Nobel Prize Winners Jean-Paul Fitoussi, Amartya Sen and Joseph Stiglitz. Data and monitoring is a significant priority because it underpins measuring development progress and informs drafting plans and policy decisions. Moreover, the SDGs are comprehensive and require more precise, regular monitoring of disaggregated data. The workshop is an opportunity to build on existing momentum², consolidate data sources, explore existing structures and systems. Importantly, the workshop is an opportunity to embark on the possibilities for further collaboration, innovation and coordination for development data.

“IN AN INCREASINGLY PERFORMANCE-ORIENTED SOCIETY, METRICS MATTER. WHAT WE MEASURE AFFECTS WHAT WE DO. IF WE HAVE STRONG METRICS, WE WILL STRIVE FOR THE WRONG THINGS.” - JOSEPH STIGLITZ AS QUOTED BY ROY TRIVEDY

Objective 1: Data Sources Identified

A total of 124 data sources were recorded through the sessions on the first day of the workshop, *Setting the Stage* and *Building the Data Map Together*. These sources are from government, civil society organizations, private sector and development partners (Annex I).

► **Session: Setting the Stage**

(Presenters: Ms. Christine Aisoli, First Assistant Secretary, Policy & Budget Division, Department of National Planning and Monitoring and Manoj K. Pandey, PhD ANU Crawford School Development Policy Centre & UPNG SBPP Division of Economics)

Ms. Christine Aisoli positioned the workshop in alignment with national frameworks, as well as ongoing and completed work. The overview of the National Planning Act reiterated the national basis of strengthening data and monitoring, particularly the National Planning Framework, National Service Delivery Framework and the MTDP III Monitoring and Evaluation Framework. The adoption of the SDG indicators as the indicators for the MTDP provides a significant opportunity because stakeholders can rally around the set of localized indicators and support the government’s plans to strengthen statistical data³.

Dr. Manoj Pandey shared a review of 28-data sources that was completed as preparation for the workshop. The review included the scope and coverage, frequency of collection, consistency of previous data collection rounds, quality of the data and how it contributes to the SDGs monitoring. There is a range of data that exists across the country. However, PNG is not capitalizing on the full potential of these data sources due to several challenges (i.e. dissemination, methodological concerns, irregular data collection frequency and coverage).

¹ This is the number at the time of drafting this report. It is based on national and localised indicators through 1) disaggregation, 2) Rewording of indicators by responsible agencies and 3) additional indicators provided by agencies themselves.

² Ongoing and completed process includes Localization of SDG processes and the MTDP III.

³ Papua New Guinea Strategy for the Development of Statistics, 2017.

► **Session: Building the Data Map Together (Introduction)**
 (Presenter: Stephanie Laryea, Monitoring and Evaluation Specialist, UN Resident Coordinator's Office)

Everyone invited to the workshop was encouraged to complete a [pre-workshop survey](#) to identify data sources, outline challenges and define strengths/opportunities. A total of 44 people respondents identified data sources, ranging from official national data sources to studies by NGOs and academia. During the Group Work portion of this session, groups of tables further reviewed the list of data sources provided in the pre-workshop survey.

You can still complete the [pre-workshop survey!](#) Your submissions will help further identify available data sources.

Objective 2: Key Partners Convened

The Data Stocktaking workshop was the first of its kind to convene data specialists from across all sectors. Over 120 people from 68 organizations, including political figures and government and civil society members, jointly discussed challenges and strengths/opportunities for strengthening data. Taking advantage of the range of attendees, the workshop also provided the opportunity to showcase innovations within Papua New Guinea and global good practices.

► **Session: Building the Data Map Together (Group Work)**

Workshop attendees jointly discussed data associated with SDG key elements, People (SDG 1, 2, 3, 4, 5 and 6), Peace (SDG 16), Planet (SDG 11, 12, 13, 14, 15) and Prosperity (SDG 7, 8, 9 and 10) and identified the below overall strengths and challenges (Table 1). Overall commonly identified strengths/opportunities were that there are existing resources and platforms to build upon, as well as newly available technologies and that many partners are interested in strengthening data sources, including indigenous groups and large youth populations. In contrast, the commonly identified challenges were data availability/dissemination, limited legislation/policies/agreements on data sharing, data quality issues, limited open data culture/demand, as well as capacity/resource challenges. Annex II details the entire list of identified strengths/opportunities and challenges.

Table 1. Summary of Identified Strengths/Opportunities and Challenges

Strengths*	Challenges*
<ul style="list-style-type: none"> • Leveraging on existing resources and platforms (10) • Existing sectoral policies on data and existing data (7) • New available technologies and innovation which are cost effective (5) • Indigenous knowledge and large youth population (3) 	<ul style="list-style-type: none"> • Decentralization: lack of demand for data at local-levels, thus it is not being collected there (i.e. exclusion of data on most vulnerable, including on gender equality) (12) • Data quality (incomplete, consistency between collection cycles, timeliness, accountability, disaggregation, etc.) (12) • Financial and resource limitations in collecting/ analysing data (i.e. diverse languages, poor infrastructure, security issues) (7) • Data is unavailable and no data culture / demand (7) • Building capacity to understand, collect and analyse data (6) • Accessibility – lack of a centralized data hub (6) • Data not used in decision making (corruption, policy, etc.) (5) • Data not available publicly or not shared (4) • Lack of collaboration and coordination (3) • Lack of data policies or implementation of existing data policies (2)

* The number after the statement denotes the frequency that the strength or challenges was mentioned in the exercise.

► **Session: Remarks**

(Presenters: Honourable Bryan Kramer, Member for Madang Open and Secretary Dickson Guina, Department of Provincial & Local Level Government Affairs)

Honorable Bryan Kramer highlighted the importance of data for political decision making. Baseline data is integral for ward community plans to be develop in Madang Province. During elections, the campaign strategy was built upon evidence from household surveys to better target constituents concerns. Now, the focus is on building the evidence to increase delivery rates at district levels.

Secretary Dickson Guina highlighted that with the current government priority on decentralization there is a significant focus on service delivery and development outcomes. The review of the Organic Law in 2014, triggered performance based power sharing or “Gradative decentralisation”. This means that there is increased autonomy for local governments to generate local resources for development outcomes and receive rewards for excellence. This reiterates the need for robust monitoring systems. A Knowledge Platform for Service Delivery is currently being developed under the government decision making body, Provincial and Local Level Service Monitoring Authority (PLLSMA). By leveraging existing partnership under the District Development Authority Act, this work will strengthen the delivery and monitoring of service delivery.

THE WORKSHOP IS AN EYE OPENER
AND THE IMPORTANCE OF DATA
IN THE PLANNING PROCESS OF
ANY ORGANIZATION.

- Workshop Participant

► **Session: Innovation Bazaar**

(Presenters: Mirriam Mondia, National Technical Consultant, Drought Recovery Project, Food and Agriculture Organization and Mr. John Pena, NFI Forest Assessment and Data Management Officer, Food and Agriculture Organization; Jagdeep Dahiya, Financial Inclusion Specialist, UN Capital Development Fund; Venkat Dheeravath, Technical Adviser, World Food Programme; Nick Turner, Consultant, UN Resident Coordinator's Office and Chika Kondoh, Communications Specialist, UN Resident Coordinator's Office; Cameron Grant, Commonwealth Scientific and Industrial Research Organisation Data 61; Darren Hanniffy, Head of Shared Value, Digicel Pacific Limited)

- **PLLSMA Decentralization Knowledge Platform (CSIRO Data 61):** The platform aims to improve availability of data and information. This open source platform will improve access to data to provide a better understanding of development progress, trends and issues across the entire country at provincial, district and local level. It will support decentralisation efforts, development policy and program decision making. This initiative builds on a partnership between the Australian National University/State, Society and Governance in Melanesia Programme (ANU/SSGM) and Government, supported by a partnership between ANU/SSGM, CSIRO Data61 and Catalpa.
- **Digicel:** As a private sector company, Digicel is engaged with partners to find solutions that will enable broad-based access to the digital platform. Through a shared value approach, Digicel is identifying platforms and tools to support development actors to introduce digital solutions to their programming. While Digicel continues to provide business solutions, there are other areas of opportunity, such as data collection through an expanding network of enumerators across the country. An example of this is the partnership with WFP, that uses Digicel's call centre to execute surveys throughout the country. Other opportunities include broad communication via bulk messaging, incentivised engagement, voice streaming and campaign management. Central to this the delivery of affordable off-grid solar power solutions throughout the country.
- **Mobile Vulnerability Analysis and Mapping (mVAM) (World Food Programme):** The mapping was initiated during the 2015-2016 El Niño event by the World Food Programme, in support of the National Disaster Centre (NDC) and the Department of Agriculture and Livestock. Two mobile food security assessments were implemented to better understand how the drought and frost impacted food security and livelihoods. The third round of data collection was completed earlier in 2017. With the inclusion of food security, nutrition and health indicators, and ongoing mobile price monitoring, priority needs and hotspots for interventions can be identified.
- **SDGs SMS Survey (UN System):** On Monday, 21 August 2017, 100,000 people across PNG were sent a text message on behalf of the UN in PNG advising of the SDGs SMS Survey. After one week, 11,128 people contacted the UN about the survey and of those, 8,039 are actively participating (71% response rate). The majority of participants are male (72%), which could be a reflection of gender differences of mobile phone ownership. There are participants registered across all 22 provinces and 89 districts, with the highest from Morobe and 169 participants from Bougainville. Initial survey results related to SDGs highlight that only 48% of participants feel safe in their local area, 52% of participants with children have not had their children immunised and 28% of respondents do not have a bank account and/or have never accessed formal banking services.
- **National Forestry Inventory (Food and Agriculture Organization):** In 2015, the forest industry contributed an estimated 9% of the GDP and 5% of formal employment. The national forest monitoring is implemented by the PNG Forest Authority to better understand what is in the Papua New Guinean Forests. A remote sensing forest assessment established an inventory of 1000 plots across the country. This enabled a botanical assessment to better understand biodiversity and forest characteristics. Zoological assessment and soil profiles are now feasible because of this work.

- **UN Capital Development Fund:** Financial inclusion innovations projects aim to better understand customers' financial behaviours and develop new products and services to increase access to financial services. The *Westpac Innovation Hub in Mount Hagen* is developing 'Instore Banking', in which merchants become agents of the Bank to provide services. The *MiBank PAYG Solar Pilot* implemented in partnership with Empawa, is providing solar kits to rural people as a micro-lease in three villages in the Highlands and Momase region. The client pays the balance amount towards the cost of the kit through regular mobile top-ups on the control panel of the solar kit (like the Easipay System). This also helps the client build their credit history. *BIMA Micro-Insurance* offers insurance products based on their transaction history with Digicel. Customers can pay insurance premiums through a mobile top-up system.

► **Session: Global Good Practices**

(Presenters: Anjori Pasricha and Richa Verma, Social Cops; Kristen Himelein Kastelic, World Bank)

Ms. Anjori Pasricha and Ms. Richa Verma shared case studies from countries that tackled data challenges by building robust systems and ensuring linkages to decision making. In India, SocialCops used mobile-based technology to establish the evidence base for micro-plans for geographic administrative levels. Nine hundred volunteers collected data for 160,000 individuals. This data was used to create 290 village profiles, which ultimately made a 40-point overall development plan. Monitoring development plans in India also presents a significant challenge, as there are 89 Ministries serving 1.2 billion people. To overcome this, SocialCops developed a web platform to help connect and understand the Government of India's work across all sectors. Using simple dashboards, the progress against targets are clearly presented and reported upon. Based on the global case studies and work in India, SocialCops presented the critical components of a Papua New Guinea data platform. The governing philosophy is a four-dimensional data system that includes reporting against MDTP, SDGs, Organizations targets and activities.

“ONE OF THE GREAT MISTAKES IS TO JUDGE POLICIES AND PROGRAMS BY THEIR INTENTIONS RATHER THAN THEIR RESULTS.” – MILTON FRIEDMAN AS QUOTED BY ANJORI PASRICHA AND RICHA VERMA

Ms. Kristen Himelein presented the work of the World Bank Group (WBG), an organization of more than 10,000 economists and sector specialists across 120 offices with the goals of ending extreme poverty and promoting shared prosperity. By supporting countries in data-driven policymaking, the WBG aims to decrease the percentage of people living on less than \$1.90 a day to no more than 3% and to foster shared prosperity by promoting income growth for the bottom 40% in every country. Responsible for 20 indicators covering 9 Sustainable Development Goals, the World Bank Group puts a premium on best practices regarding the collection of rigorous and representative data, as well as experimentation and implementing new innovations. Examples of these innovations include using geospatial data for sampling, poverty estimation, and real-time monitoring (i.e. disasters, deforestation, slum growth). The Survey of Well-Being via Instant and Frequent Tracking (SWIFT) is another innovation that uses data science techniques to estimate income, poverty, growth, and other indicators with only 10-15 questions. This is particularly useful in places where more frequent data collection is not possible due to the cost of administering surveys or the context is too dangerous. Employing high-frequency cell phone surveys is another option for difficult contexts, and the impact of the Ebola crisis in West Africa was measured using this method. With a robust sampling frame based on representative exiting pre-Ebola surveys, the results were re-weighted to be nationally representative and make estimations for the entire population on several topics including employment, food security, migration, health and security.

Objective 3: Next Steps Agreed

► **Session: Envisioning our next steps (Group Work)**

Workshop attendees turned their focus on defining key actions to address the challenges and strengths/opportunities previously identified. The Day 1 outcomes were categorized into six strategic areas (Annex III). Considering the discussions on innovations, global good practices, as well as the remarks from honorable members, attendees listed and prioritized key future activities across the strategic areas. To define the necessary activities as per the challenges the following 6 strategic areas were identified. Table 2 summarizes the strategic areas and prioritized activities (please refer to Annex IV for the full list).

Table 2. Identified Strategic Areas and Prioritized Key Activities	
Strategic Areas	Prioritized Key Activities
1. Coordination and Strategic Leadership	– Advocate for NSO to take lead in the development for data process
1. Innovations/Modernization	– Develop a centralized ICT open source database
3. Strengthening Basic Statistic Activities	– Build technical capacity; – Use modern technology for data collection; – Secure adequate reliable funding – Establish Statistical Governance Strategy
4. Dissemination and Use	– Centralize data and establish a hub – Build technical capacity
5. Multi-Stakeholder Partnerships	– Establish a convening body such as PNGData4development – Develop a Communication/Dissemination Strategy
6. Capacity Building/Resources	– Simplify technology use and enable cost effective methods such as use of internet at local level

WAY FORWARD

As the first of its kind, the Data Stocktaking Workshop catalyzed inclusive dialogue on strengthening data and monitoring in Papua New Guinea.

The launch of the PNGData4Development Network is the way forward for this work. A PNGData4Development Network website will be launched. Interested organizations can formally join the network by [agreeing to the following commitments](#):

- ▶ **Convene at least one meeting related to data for development within the next 12 months:** This meeting should be open and advertised through the network before the event takes place. In addition to the date, time, venue, and topic, this advertisement will need to include the maximum number of people that can attend. These meetings should be badged as ‘a contribution to the PNG Data4Development Network. The United Nations commits to convening at least one meeting on each SDG key element People, Planet, Peace and Prosperity by Sept 2018.
- ▶ **Populate the PNGData4Development Website:** Members of the network commit to disseminate data, studies, papers, reports and other data through the website to make data available and accessible to anyone who is interested. The data sources identified through this platform will continue to support the demand of data through regular updates.
- ▶ **Share their organization’s high-quality logo:** Members who commit to the above will also be requested to share a high-quality logo to share on the PNGdata4development website.

The PNGData4Development Network website will be the way to keep informed about future work and ongoing network developments.

“SUPER IMPORTANT WORKSHOP. FANTASTIC START TO A VERY IMPORTANT PROCESS THAT IS VERY NEEDED. A REAL BOOST TO OUR COMMUNITY.”

– WORKSHOP PARTICIPANT
FROM THE WORKSHOP EVALUATION FORM

The Working Group who organized this event would like to thank all participants whose active engagement throughout the course of the workshop made it a success. Further, the Working Group would also like to extend sincere appreciation to all the presenters and facilitators who were a crucial aspect towards the success of the workshop.

For inquiries please contact: PNGdata4development@gmail.com.

Interested in joining the PNGData4Development Network? [Please visit this page](#).

ANNEXES

Annex I. List of Identified Data Sources

**This list is not exhaustive. Presence in this list is not an endorsement, recommendation nor verification of any work, data or findings/results.*

1. Banking and Finance Data	31. National Maritime Safety Authority (NMSA) Annual Report
2. Behavioural Surveillance Survey 2010	32. National Population and Housing Census (NPHC)
3. BPNG Employment Survey	33. Office of Urbanization statistics
4. Business Liaison Survey (BLS)	34. PNG Power Annual Report
5. Census of Business Activities (CBA), (2001, 2009, 2013, 2016)	35. Ports Annual Report
6. Civil Aviation Safety Authority (CASA) Annual Report	36. Post PNG Annual Report
7. Commodity Board Annual Report	37. Poverty Statistics
8. Consumer Price Index	38. Sanitation Reports (Water PNG or Eda Ranu)
9. Consumer Price Survey (CPS) (quarterly, 1970, 2014)	39. National School Census
10. Demographic and Health Survey (DHS), 1996, 2006	40. Tax data / statistics
11. Department of Higher Education, Research, Science and Technology Graduate Destination Survey (GDS)	41. Tax returns
12. Department of Higher Education, Research, Science and Technology (DHERST) Annual report Enrolment, Graduates, Staffing)	42. Tourism Promotion Statistics
13. Department of Higher Education, Research, Science and Technology (DHERST) Labour report	43. Trade statistics
14. Duty tax	44. Transport Annual Report
15. Education Annual Report	45. Vital Statistics
16. Department of Education Statistics Bulletin	46. Water Annual Reports (Water PNG or Eda Ranu)
17. Department of Education Special Education Division for Special Resource Learning Centre	47. Works Annual Report
18. Environment and Conservation and of Climate Change Development Authority (CCDA)	48. Public Expenditure and Service Delivery Survey in Health 2002
19. Financial Capability Survey	49. Public Expenditure and Service Delivery Survey 2002. A survey of 220 schools
20. Government Finance Statistics (GFS)	50. Household Income and Expenditure Survey 1996
21. Health Annual Report	51. Household Income and Expenditure Survey 2009-2010
22. Health Statistics	52. Early Grade Reading Assessment 2011, Madang
23. Health Surveillance data	53. Early Grade Reading Assessment 2012, National Capital District
24. Household Income & Expenditure Survey (HIES)	54. Early Grade Reading Assessment 2012, East New Britain
25. Labour Annual Report	55. Early Grade Reading Assessment 2013, Western Highlands Province
26. Labour Force Survey (LFS)	56. World Bank Group Country Survey 2014
27. Lands and Physical Planning Annual Report	57. Household Income and Expenditure Survey 1996
28. National Agriculture Survey (NAS)	58. Census 1980, 2000, 2011
29. National Airports Annual Report	59. Public Expenditure and Service Delivery 2004
30. National Health Information System (NHIS)	60. Demographic and Health Survey 1996, 2006
	61. Informal sector business survey, INA

Annex I. List of Identified Data Sources

**This list is not exhaustive. Presence in this list is not an endorsement, recommendation nor verification of any work, data or findings/results.*

62. [Centre for Excellence in Financial Inclusion - Papua New Guinea](#)
63. [MIX Market Financial Inclusion Data](#)
64. [Papua New Guinea 2017 Crime & Safety Report - OSAC](#)
65. Crime/Harassment Statistics in public transport and public spaces
66. Data on persons living with disability
67. National GBV and violence against children database
68. Child labour, children living in the streets
69. Transportation mobility and demand data
70. Public transportation providers
71. Media/telecommunications coverage
72. Comparative sex disaggregated statistics (salaries for same jobs, positions of leadership, access to public services, education & healthcare, formal employment)
73. Court Reporting Service (CRS)
74. Criminal Justice Database/Department of Justice
75. International Visitor Survey 2017
76. National Financial Capability survey 2014
77. [Bank of Papua New Guinea Quarterly Economic Bulletin Statistics](#)
78. [Bank of Papua New Guinea Fortnightly Statistical Updates](#)
79. [Bank of Papua New Guinea Monthly Economic Review Report](#)
80. [World Bank Enterprise Survey 2015 \(Link 2\)](#)
81. Institute of National Affairs Private Sector Surveys 2002, [2007](#), 2012, 2017
82. Institute of National Affairs Labour Market Surveys
83. Institute of National Affairs School Based Civic Education Survey [2015](#)
84. [Australian National University PNG Elections Database](#)
85. PNG Electoral Commission Annual Reports [2015](#), [2016](#), [2017](#)
86. [Australian National University Budget Databases](#)
87. [National Research Institute of PNG/Australian National University Promoting Effective Public Expenditure Project](#)
88. National Nutrition Survey 2005
89. PNG Institute of Medical Research Performance Evaluation Survey
90. STEPwise approach to chronic disease risk factor surveillance (STEPS) Survey [2007-2008](#)
91. Health Facility Surveys 2010, 2011, 2012, 2014, 2016
92. Transparency International PNG Perception Survey regarding Corruption [2015](#)
93. Annual Energy Balance Table - Energy Supply and Demand Data
94. Petroleum and Energy Department (Crude)
95. [UN Comtrade](#)
96. Mineral Renewed Energy (MRE)
97. Water resource Bureau
98. Higher education technology
99. International Organization for Migration Displacement Tracking Mechanism
100. World Food Programme Mobile Vulnerability Analysis and Mapping (mVAM)
101. National Weather Service
102. National Roads authority
103. Interest rates, exchange rates, inflation rates
104. Mining data/Land owners
105. Customs Data
106. Night Lights
107. Water and sanitation in health facilities / schools
108. Literacy Survey
109. Workforce survey
110. National Headcount Survey (health) 2009
111. Mobile/ICT Coverage Report
112. Happiness Index – Peaceful Cities
113. IOM Vulnerability Assessment
114. Social Security Index
115. Human Capital Index
116. Human Development Index
117. Women in Agriculture Survey (Food and Agriculture Organization,, OXFAM)
118. National Gender Survey
119. PNG Immigration and Citizenship Services Authority
120. Department of Labour and Industrial Relationship
121. Sport Survey
122. Multi-Indicator Cluster Survey (MICS)
123. Agriculture Administrative Records
124. Education Information Management System

Annex II. Strengths/Opportunities and Challenges by Key SDG Elements – People, Planet, Peace and Prosperity

Peace	
Challenges	Strengths
Data analysis issues centred around capturing data at the central level: no demand for data	Available platforms for real-time data and enabling minority groups to be included
Different legislation constraints surrounding data collection.	To get legislations focus on data systems (Enforce Freedom of Information under Section 55 of PNG Constitution)
Improve data literacy and data consumption	Harmonize other legislations with the NSO Legislation on Statistics
Less engagement by people in data surveys: lack of awareness and advocacy	Existence of Peace and Good Order Committee
Lack of information from village courts; difficulty in retrieving information at the village level by subnational and national line of departments for example depts/agencies under Law and Justice sector	Opportunity to open-up more data to public access
Lack of resources (ICT platforms, finance)	Reinforce open govt partnerships
Missing data on illegal activities	Existing data collection mechanisms (E.g. Log books for Police Stations)
Reporting real-time data	Land mediators
Analysis of intra-migration data	Court annexed mediation
Demand for data by public, subnational and national levels	Available platforms for real-time data and enabling minority groups to be included
Different local languages acting as barriers	To get legislations focus on data systems (Enforce Freedom of Information under Section 55 of PNG Constitution)
Lack of technical capacity	Harmonize other legislations with the NSO Legislation on Statistics
Minority community and groups not included	Existence of Peace and Good Order Committee
Data analysis issues centred around capturing data at the central level: no demand for data	Opportunity to open-up more data to public access
Different legislation constraints surrounding data collection.	Reinforce open govt partnerships
Improve data literacy and data consumption	Existing data collection mechanisms (E.g. Log books for Police Stations)
Less engagement by people in data surveys: lack of awareness and advocacy	Land mediators
Lack of information from village courts; difficulty in retrieving information at the village level by subnational and national line of departments for example depts/agencies under Law and Justice sector	Court annexed mediation
Lack of resources (ICT platforms, finance)	Available platforms for real-time data and enabling minority groups to be included
Missing data on illegal activities	To get legislations focus on data systems (Enforce Freedom of Information under Section 55 of PNG Constitution)
Planet	
Challenges	Strengths
Monitoring sea level rise	Use of technology in terms of Remote Sensing for land monitoring
Need to update existing data; consistent tracking of information	Existing data – baseline datas
Timeliness and accuracy of data	Leveraging on existing partnerships and initiatives
Physical security for data collectors	Introducing Dashboard system – present, visualize and access to data
Missing links between and among agencies	Urbanization – capturing intra-migration – an engine for growth
Meeting the load with Technology (ICT)	Feedback loop to LLGs
Lack of mandatory legislation	
Response rates	

Annex II. Strengths/Opportunities and Challenges by Key SDG Elements – People, Planet, Peace and Prosperity

People	
Challenges	Strengths
Missing data sources	Available data (however, scattered/fragmented)
Capacity Building – Technical Skills (Special TRG)	Available human resource (however, lacking technical skills)
Accessibility – Lack of ICT infrastructure constraining raw data collection and management	Opportunity to build capacity and skill
Government Decentralization – Communication Gaps;	Introduction of new technologies and innovation (Telecommunications; use of mobile apps and equipment such as drones)- cost effective if utilized well
Legislation – Mandatory data supply; Restrictions by companies on information sharing	Existing sectoral policies that may be guidelines to data collection and management
Lack of political will: Provincial and local level should be hub of data collection	Reliable data open sources/platforms
Lack of data hub: non-existing centralized database.	Fairly consolidated system
Limited funding	People goals link to other goals; implement and coincide with PNG SDS
Lack of disaggregation of data (not adequately capturing disadvantage/minority groups not captured; complexity of PNG divers culture not captured in sampling; Representation of data)	Strengthen coordination among partners in terms of data sharing;
Continued monitoring (drawing from data samples)	Available data (however, scattered/fragmented)
Difficulty with analytical approaches and methods	Available human resource (however, lacking technical skills)
Restrictions with data sharing	Opportunity to build capacity and skill
Geographical terrain difficulties	Introduction of new technologies and innovation (Telecommunications; use of mobile apps and equipment such as drones)- cost effective if utilized well
High cost involved with acquiring data – e.g expensive internet	Existing sectoral policies that may be guidelines to data collection and management
Lack of “Data Culture”	Reliable data open sources/platforms
Lacking completion of the “data cycle”	Fairly consolidated system
Less advocacy on importance of data in decision making	People goals link to other goals; implement and coincide with PNG SDS
Lack of consistency in with data collection and management	Strengthen coordination among partners in terms of data sharing;
Political influence on data	Available data (however, scattered/fragmented)
Lack of collaboration and coordination	Available human resource (however, lacking technical skills)
Lack of pooling resources from different sectors	Opportunity to build capacity and skill

Annex II. Strengths/Opportunities and Challenges by Key SDG Elements – People, Planet, Peace and Prosperity

Prosperity	
Challenges	Strengths
Fragmented data and lack of accountability of data	Advance on clean energy; use innovative technology
Lack of demand for data; “no data culture”	Build on existing SMEs
No fiscal economic growth for provinces	Build on labour force data
Weak M&E framework	Strengthen sustainable energy production
Lack of infrastructure; inaccessibility to data	Intellectual property rights on indigenous knowledge
Underutilization of skilled human resources: less job opportunities for new university graduates	Tap into building up the population of young people
Issue of inequality; gaps between poor and rich and gender inequality	Opportunity to centralize datasets
Management of existing data systems	Advance on clean energy; use innovative technology
Lack of implementation of existing policies that support data systems	
Issues of outdated data (e.g GDP is based on data that is outdated)	
Update existing data sets	
Lack of measurement of labour market.	
Generating data at the provincial and local levels	
No centralized database	
No National Growth Strategy or Provincial Growth Strategy	
Timely and reliable data sets	
No mechanisms for information sharing	
Work bottom up (local level – national Level)	

Annex III. Strengths/Opportunities and Challenges by Strategic Areas

Strategic Areas			
	1. Coordination and Strategic Leadership	2. Innovations/Modernization	3. Strengthening Basic Statistic Activities
CHALLENGES	<ul style="list-style-type: none"> Legislation – data supply/privacy/etc. Limited political will (All levels) Lack of data policies or implementation of policies Data not used in decision making (corruption, policy, etc.) Lack of coordination Weak M&E framework Lack of information from village courts Demand for data by public, subnational and national levels Physical security for data collectors 	<ul style="list-style-type: none"> Limited ICT Infrastructure constraining data collection/management Accessibility – lack of a centralized data hub of data on all levels Geographic terrain Expensive internet connections Management of existing data systems Reporting real-time data Different local languages acting as barriers 	<ul style="list-style-type: none"> Data quality issues (incomplete, consistency of “data cycles”, timeliness, accountability for data, not disaggregated, etc.) Quality standards not established and inconsistently implemented Exclusion of data on most vulnerable, including on gender equality Continuous monitoring across data sets Outdated data Physical security for data collectors Missing data on illegal activities, from village courts Monitoring sea level rise
STRENGTHS/ OPPORTUNITIES	<ul style="list-style-type: none"> To get legislations focus on data systems (Enforce Freedom of Information under Section 55 of PNG Constitution Harmonize other legislations with the NSO Legislation on Statistics Existing data collection mechanisms (E.g. Log books for Police Stations) Existing sectoral policies that may be guidelines to data collection and management Feedback loop to LLGs Intellectual property rights on indigenous knowledge 	<ul style="list-style-type: none"> Available platforms for real-time data and enabling minority groups to be included Opportunity for Open data Introduction of new technologies and innovation (Telecommunications; use of mobile apps and equipment such as drones)- cost effective if utilized well Use of technology in terms of Remote Sensing for land monitoring Opportunity to centralize datasets Introducing Dashboard system – present, visualize and access to data 	<ul style="list-style-type: none"> Existing data collection mechanisms (E.g. Log books for Police Stations) Urbanization – capturing intra-migration – an engine for growth Advance on clean energy; use innovative technology Build on labour force data

Annex III. Strengths/Opportunities and Challenges by Strategic Areas

Strategic Areas			
	4. Dissemination and Use	5. Multi-Stakeholder Partnerships	6. Capacity Building/Resources
CHALLENGES	<ul style="list-style-type: none"> Limited accessibility to data/limited data sharing Decentralization: lack of demand for at local-levels Limited demand Data not used in decision making (corruption, policy, etc.) Less advocacy on evidence based decision making No mechanism for information sharing Improve data literacy and data consumption Lack of awareness and advocacy Different local languages acting as barriers 	<ul style="list-style-type: none"> No data culture Limited collaboration Fragmented data No mechanism for information sharing Demand for data by public, subnational and national levels Different local languages acting as barriers Land mediators Court annexed mediation People goals link to other goals; implement and coincide with PNG SDS Existing data collection mechanisms (E.g. Log books for Police Stations) Land mediators Courts 	<ul style="list-style-type: none"> Financial and resource limitations in collecting/ analysing data (i.e. diverse languages, poor infrastructure, security issues, increase cost of collection) No data culture / demand Limited statistical/technical capacity Underutilization of skilled human resources/limited job opportunities for new grads Data literacy and data consumption Lack of awareness and advocacy Different local languages acting as barriers
STRENGTHS/ OPPORTUNITIES	<ul style="list-style-type: none"> Feedback loop to LLGs 	<ul style="list-style-type: none"> Reinforce open govt partnerships Existing data collection mechanisms (E.g. Log books for Police Stations) SMEs 	<ul style="list-style-type: none"> human resources are available Strengthen sustainable energy production Tap into building up the population of young people

Annex IV. Key Activities by Strategic Area

Strategic Area 1: Coordination and Strategic Leadership	Strategic Area 2: Innovations/Modernizations	Strategic Area 3: Strengthening basic statistics activities
<ul style="list-style-type: none"> - Advocate for statistical agency NSO to take lead in the development for data processes - Advocate for NSO to review the National Statistical Act and create policies - Engage community to advocate for data uses, data sharing and transparency - Ensure data privacy - Advocate for PNGSDS to be endorsed - Political will and leadership 	<ul style="list-style-type: none"> - Set up centralized ICT database - Report on Infrastructure conditions for country regarding platforms for data - Carry out feasibility studies - Secure funding for the development of data process 	<ul style="list-style-type: none"> - Use modern technology for data collection - Build technical capacity - Control over standard of questionnaire and quality for surveys - Use of administrative data and other surveys - Comparable across time/various surveys - Secure adequate and reliable funding - Panel data - Proper framework to share data - Reduce duplicates of work - Awareness on data collection - Storage of Data (e.g. Cloud storage) - Establish the statistical Governance strategy (Policy Framework) <ul style="list-style-type: none"> • Establish statistical coordination units to enhance data sharing • Establish statistical/technical working groups - Strengthening Partnerships through MOUs/MOAs - Identifying relevant data user needs - Tools: Consolidate available data; New data collection

Annex IV. Key Activities by Strategic Area

Strategic Area 4: Dissemination and Use	Strategic Area 5: Multi stakeholder partnerships	Strategic Area 6: Capacity Building
<ul style="list-style-type: none"> - Centralize Data <ul style="list-style-type: none"> • Capacity building of centralized/data hub – Custodian expertise, security (firewalls), uploading documents • Increase manpower • Standardized guidelines for data • Data Hub • Policy needed to guide collection for submission of data • Review Policy framework that govern data collection and sharing - Data Literacy <ul style="list-style-type: none"> • Data Missionaries • Include basic statistics in secondary education curriculum and research quantity and quality at university departments • Make data relevant to local use – Roadshows; data maps expos etc. - Locally sustainable effective and accurate data collection <ul style="list-style-type: none"> - Customized interface - Visualization of data: Mediums with pictures/symbols - Different means of dissemination <ul style="list-style-type: none"> • Equipping certain levels/people with laptops etc. • Print out in Public spaces • On/Offline App • Platform in appropriate languages - Tag data for specific purposes (e.g Election; Disasters etc) - Mandated Planning processes - Increased public scrutiny 	<ul style="list-style-type: none"> - Develop a convening body such as PNG-Data4development improving on PNGINFO - Collaborative Cost Sharing initiative in data management - Chaired by Chief secretary - Team responsible for data administration and management - Platform for dissemination and accessibility - Communication strategy to (GoPNG) to subsidise data dissemination platform - To convene monthly - Partnership arrangement with all stakeholders, including businesses: PPP Digicel/BSP/System developers - All departments/stakeholders linking to the system 	<ul style="list-style-type: none"> - Work on information facilitators - Simplifying mobile use for local level - Digital billboards - Academic Institutions to build on technical capacity - Affordable internet access for local communities - Open data for community activities - In house discussion - Disband cultural barriers - Effective monitoring