SPOTLIGHT

BARRIERS TO THE USE OF DATA TO DRIVE POLICY DECISIONS IN PAPUA NEW GUINEA

Peter Michael Magury

Key Points

- This Spotlight report is based on numerous data analysis workshops, meetings, telephone interviews with statistical officers in provinces, discussions and face-to-face interviews with government departments' officers dealing with statistics.

- The report looks at the perceptions of data users and producers on blockers or barriers that stop data being used to drive policy decisions and interventions that can work to help build capability and the will to address this in Papua New Guinea (PNG).

- The blockers identified in this report include lack of skills and knowledge in data use, poor data quality, inadequate availability of data and relationships between data producers and users as barriers that stop data being used to drive policy decisions.

- Interventions such as building skills and knowledge in data use, improve data quality and communication, access and improve engagement between data users and producers can improve data used to drive policy decisions.

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BARRIERS TO THE USE OF DATA TO DRIVE POLICY DECISIONS IN PAPUA NEW GUINEA

By Peter Michael Magury

This paper examines barriers that restrict the use of data to drive decisions and sets out a series of interventions designed to improve their effectiveness at the national, provincial and district levels in PNG. This report undertakes activities including numerous data analysis workshops, meetings, telephone interviews with statistical officers in provinces and, discussions and face-to-face interviews with government departments' officers dealing with statistics. The above interview methods revolve around these two areas:

i. What are the barriers that restrict the use of data to drive decisions in PNG?

ii. Outline your experience of what can work to help build capacity or capability and the will to address these blockers.

This report identifies that there are many barriers that restrict the use of data to drive policy decisions in PNG. These include lack of skills and knowledge in data use, poor data quality, inadequate availability of data, and relationships between data producers and users. These blockers exist in all levels of government and will take some time to solve.

However, the strategy has been to look at interventions that can work to help build capability and the will to address these barriers, which can make a difference in using data to drive decisions (Department of National Planning & Monitoring, 2018). This report discusses each barrier followed by proposed interventions that can build capability and the will to address them (Pacific Community, 2015).

Barriers to the use of data for making informed decisions

- **Knowledge gaps in statistical skills and data use.**

    This report shows that there are data officers in many government departments that need core competencies in data analysis, interpretation and presentation.

    Data producers or individuals responsible for producing and managing data require special skills to access, analyse, interpret, and summarise data into clear messages for decision-makers in presentable formats (Li et al., 2018).

Depending on the role that the data producer plays in the data collection and use process, they may also need specific skills in information and communication technology (ICT) and use of management information system, data analytic tools and techniques (for example, GIS), and data communication and advocacy (Pacific Community, 2015).

- **Poor data quality.**

    Data that are of poor quality are those data that are not timely, credible, accurate and complete. They cannot effectively be used to track program performance, and thus negatively impacts strategic planning and decision making. Poor data quality limits the confidence and value that decision and policy-makers place on data, impacting future demand for data in decision-making processes. Data quality can be compromised due to unnecessary data collection processes at local service delivery levels, often due to complicated reporting procedures, lack of regulated and coordinated systems for data collection, limited technology, and the lack of infrastructure and computer issues.

- **Lack of data availability.**

    Access to relevant data

    Recent assessment on data usage indicates that an overall lack of access to data to support decisions is a key barrier to data use. Government officials are not always aware of existing data or how data might be useful for decision making. It can be time-consuming and complicated to collect relevant data, especially if a central data storage with information on all available data does not exist (Li et al., 2018).

    The lack of access to data that are most relevant for decision-makers is a major barrier to its use. Data that are available are not always aligned to the needs of decision-makers or have restrictions for access. Decision-makers may not have access to all relevant data sources to guide policy and management decisions, including information linked to other government functions (Department of National Planning & Monitoring, 2018).

Poor packaging of data and communication to decision and policy-makers.

The way that information is collected, packaged and communicated to decision-makers impacts its availability and thus its use in decision making. Often, there are too many details and inappropriate presentation formats that can affect the level of understanding the data and applying them to the decision-making process. For example, data can be presented in simple formats that are user friendly, easy to read and able to present a message (Li et al., 2018).

The lack of information breakup for different audiences may also affect data use, as managers at different levels require different types of information and levels of groups for various types of decisions. Poor packaging of data limits a data user's ability to understand the message behind the data. The relevance of data is a key element of whether stakeholders are likely to use the information.

To inform decision making, data must also be available at the time they are needed. Data are more likely to inform decisions when they are readily available at specific windows of opportunity for policy and planning implementations. However, the cycle of data aggregation, analysis, and communication is often delayed such that information products are published based on outdated data. Data are often not analysed and disseminated in a timely manner to contribute to decision-making processes.

- **Maintaining contacts between data producers and users**

  A major barrier to data use is the lack of continuous communication between those who produce data and those who use data to make decisions, throughout the phases of data collection, analysis, interpretation, and use. A lack of shared respect and mistrust in the skills and competencies of those producing data often increase opinions of data quality issues and prevents decision-makers from demanding and taking actions based on data.

  Additionally, data producers are often not included in making decisions and assumptions about right information needs for acting on data, resulting in data produced without local relevance or practical use. Data producers are often unaware of policy and decision-making cycles, strategic priorities and information needs and timelines (Pacific Community, 2015). Thus, they may not plan for the right time needed for the production, analysis and presentation of data. This is due

to poor line of communication about decision-making priorities; lack of clarity on the types of information likely to be needed by relevant stakeholders; lack of clarity on those decisions the information is likely to inform; and how data should be sourced, analysed, interpreted, and disseminated to meet decision-makers' needs (Pacific Community, 2015).

Interventions that can be used to address data barriers

Build capability in data use. There are several examples of interventions that are involved in building skills and knowledge in data use. Firstly, capacity building is commonly one part of integrated data use interventions, taking the form of workshops, trainings, and on-the-job coaching and mentoring on data use, analysis and interpretation. For example, government agencies can conduct capacity building aimed at building the capacity of decision-makers to identify information needs, interpret data, and use data in decision making (Pacific Community, 2015). Secondly, conduct training that focuses on field data collection, data analysis, and decision making. The training should use local data such as population census, Household Income and Expenditure Survey and Demographic Household Survey and service to improve participants' information literacy.

Improve data quality. Several strategies exist for improving the quality of data. Many data quality assessment tools such as Routine Data Quality Assessment Tool and Excel templates exist to understand the strengths and weaknesses in data quality systems and processes for routine information, including the data quality review and the routine data quality assessment. Other important parts of data quality interventions include the regular review of Management Information System (MIS) data quality, feedback between collection, management, and policy, and engagement of statistical officers across facility, district, and provincial levels that provide data.

Improve data communication and access. There are many examples of electronic information systems that have increased access to government and private sector information and increased the use of data. For example, a national electronic data management system can increase data accessibility, timeliness, appropriateness for decision making needs, and tool that supports better management and monitoring practices. The implementation of software platforms such as MIS can also facilitate the accessibility of data across many sources, as well as the easy generation of tables, graphs, charts, and information that simplify data use. The current work of the Department of Information

and Communication Technology in driving the use of ICT to improve the government system and processes is commendable and should be supported.

Improve engagement between data users and producers. There are several examples of interventions that increase continuous dialogue and engagement between data users and producers. These include meetings that regularly call for data users and producers to critically review the performance of data and key indicators, discuss program progress, and identify strategic issues and implications for program improvement can also improve the engagement between these two groups. The other best practice is to bring together researchers, policymakers, and implementers to discuss the best approaches on how to collect and synthesise research-based evidence to produce briefs for policymakers.

Conclusion

The report has identified several barriers that restrict data from being used to drive policy decisions in some government departments in PNG. These blockers include lack of skills and knowledge in data use, poor data quality, inadequate availability of data and relationships between data producers and users. The report also provides proposed interventions of what can work to help build capability and the will to address these barriers. These proposed interventions or actions represent a significant start to improve better data flows that will lead to the implementation of better policy and fairer decision making, which in turn will benefit many government organisations in PNG.

Recommendations

i.   The National Statistics Office (NSO) as the central data centre should assist government agencies to improve data collection, processing, quality control, analysis and dissemination through data analysis training, workshops and other support.

ii. Improved continuous communication between users and producers of data in the national, provincial and district levels, statisticians in line departments, donor agencies and the National Statistics Office through data analysis trainings, workshops and meetings.

iii. Strengthened co-operation with government departments and other development agencies (such as Australian DFAT, UNESCO and UNICEF) in the area of statistical capacity building

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About the Author

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