Data Dissemination

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Data dissemination is a phase in statistical processes, in which, data collected and compiled by statistical agencies are released to the public. The First Principle of UN Fundamental Principle of Official Statistics states clearly the responsibility of releasing information to the public:

Official statistics provide an indispensable element in the information system of a democratic society, serving the Government, the economy and the public with data about the economic, demographic, social and environmental situation. To this end, official statistics that meet the test of practical utility are to be compiled and made available on an impartial basis by official statistical agencies to honour citizens’ entitlement to public information.

For the purpose of planning the NSDS, dissemination should be considered the ultimate objective of a statistical system within the context of an integrated development plan. With greater potential for access to data, there are two aspects that should be reflected in an NSDS: official dissemination and dissemination-at-large.

Official Dissemination

A responsive statistical agency commits to releasing information to the public according to a release calendar. This obligation carries a significant commitment as this process implies defining key indicators that have to be released at regular intervals. These can satisfy national reporting and regional and international reporting. For this, IMF’s GDDS and SDDS set out clear standards. Working on a data dissemination plan should involve the focal points and key persons involved in the process across the statistical system. Countries developing their NSDS should focus substantially on complying with the GDDS and should bring together all key players in order to assure compliance, improvement and eventual transition into more complex and ordered processes as provided by the SDDS. Reporting by statistical agencies to international monitoring agencies often follow specific reporting requirements and formats that are reported to these agencies. These should be reconciled within the context of a public data dissemination policy in which the public-at-large have access to the same information reported to regional and international agencies. It is important to recall that among the many practices outlined in the GDDS, simultaneity of release is vital.

Public-at-large

Disseminating data to the public-at-large requires careful consideration and strategies. Countries should develop data dissemination strategies. The illustration below (UNECA) provides a conceptual reference that should define the various user communities and the demand for data they require.
Developing an approach to dissemination targeting users should be the cornerstone of the NSDS. The development of a coherent data dissemination policy with an enabling development document such as the NSDS that accounts for activities and funding and monitoring progress will provide the practical context for implementing the dissemination policy. Using the diagram above, while formulating the NSDS, the NSS should answer the following questions: What are the key users and the key means by which the system will inform them? Targeting users with specific publications or dissemination portals can be effective. However their effectiveness should be measured in order to continually assess demand.

One key aspect that a statistical agency should keep in mind is the need to provide relevant and effective data visuals for informing certain sectors in society. Journalists may require certain ways to view statistical concepts; policy makers may have their own preferred ways to visualize. Developing creative approaches to data visualization can have an impact in process of vulgarizing the use of data.

PARIS21 has developed and compiled some tools for promoting data visualization through a targeted training program (see: [http://www.paris21.org/datavis](http://www.paris21.org/datavis)), which serves as a venue for collaboration between statisticians and users to adopt data visualisation tools and ensure its wider use in the statistical system.

**Measuring Effectiveness**

Any NSDS should have monitoring indicators designed to determine the effectiveness of their data dissemination policy. These should be regularly reported against. Including these
measurement indicators in the NSDS will assure that the indicators are reported. These indicators should respond to certain fundamental questions and include:

• Are data portals effective ways to disseminate aggregate data?
  o Use google analytics to measure public access and use of certain sites

• Are there other ways to disseminate data?
  o Number of informal phone calls received for data? Number of emails requesting data and what data?

• What institutions in the country are most active in data use?
  o Number of research or other agencies actively engaged in a partnership with statistical agencies

• What are the most effective public information campaigns for increasing data use?
  o Increase in web site traffic (use spikes) after promotional campaigns

These monitoring indicators should be part of the full package of an NSDS designed not only to develop dissemination systems that respond to international standards but also respond to the variety of data users. And for the NSDS, it is critical to focus on the national use of data by national practitioners and the impact they are having in determining a country’s autonomous ability to develop a deep and abiding statistical culture.

**Some items for including Data Dissemination into the NSDS**

- Does the country participate in the GDDS? Is the focal point for the GDDS involved in defining minimum standards?
- Are standards such as release calendars and simultaneous release of information accounted for in the NSDS?
- Is there an integrated view of data dissemination expressed in a data dissemination policy?
- Are there reforms required in the law to allow for greater access to data?
- Are confidentiality requirements met?
- Are users well defined?
- Are public information campaigns included in the NSDS?

**Data Portals**

There are two aspects of data dissemination, which have gone through monumental changes in recent times and therefore deserve close evaluation. The ‘media’ carrying the releases (from paper to digital transformations) and the ‘delivery’ of the releases; which is transforming itself through the “connectedness” of the Internet, from being ‘one-to-one’ model of communication to ‘one-to-many’

The growing use of data portals among the NSOs for data dissemination, illustrates this trend. It is a positive development which allows for greater data availability and accessibility. The Handbook on Major Statistical Data Management Platforms by UNECA is an important resource for NSOs and can provide guidance during the decision-making process to help NSOs select the appropriate platform for managing and disseminating statistical data to their users. Another useful resource is the World Bank’s technical assessment of open data platforms for NSOs.
While there have been good intentions to harness the potential of data portals, when it comes to the actual implementation the outcomes have been mixed. One particular problem has been the set-up of multiple data portals with overlapping functionalities and their lack of integration – particularly in the most aid-dependent countries. This has resulted in (i) duplication of workload for already resource-constrained NSOs who have to maintain several data portals and update information manually, (ii) confusion for users who consult the various data portals with often conflicting results, and (iii) overall high costs for demonstrably low usage of these portals.

In this context, PARIS21 has produced a discussion paper - Making Data Portals work for SDGs: A view on deployment, design and technology. This paper offers lessons on how the deployment, design and technology considerations can be improved as NSOs enter the implementation and monitoring phase of the Sustainable Development Goals – which will lead to a further push for data portals.

Centralised data dissemination frameworks

A framework for data dissemination as a culmination of a larger process of effective and efficient data management could be a solution that NSOs may pursue. Unlike stand-alone and distinct data dissemination platforms, applications following a modular architecture which tightly binds back-end and front-end and which may give rise to a centralised data dissemination environment could be a way forward. Following the standards such as Common Statistical Production Architecture (CSPA) framework, the new framework may bring with it a deep focus on much needed process re-engineering and strengthening in the NSOs.

Data Communication

Communicating official data and statistics requires concerted efforts. When data is communicated well, it is easy to appreciate its positive influence on its consumption and therefore development impact driven by it. NSOs may realise this, by supplying to the right audience the right data in the right format. In order to increase the likelihood that a target audience will pay attention and use data made available, one must consider the appropriate timing and channels for delivery and distribution of the data.

It is important to recognise that communicating data is a special case of communicating in general. In this context, use of the word “data” here is done in more explicit sense of “information in numerical form” and not in the general sense of factual information. Hence, the goal of effective “data” communication is to ensure that data is transmitted, decoded, and understood accurately, and acted upon.

With this perspective, a broader communication strategy, in which data communication could be made a component, could be developed by the NSO in close collaboration with the members of the NSS. In most cases, the main purpose of this strategy would be to systematically guide the efforts of the NSS in raising awareness and mobilizing support towards attaining the objectives outlined in the country’s NSDS. Having data communication as a component there would draw the needed attention and resources for its effective implementation. This document may contain a collection of strategies and identified target audiences and corresponding key messages, by which, the NSO would seek to achieve its data advocacy and communication goal and the strategic objectives of the NSDS specifically related to data. For general advocacy and communication on the
NSDS, see also the chapter “D. ADVOCATING” in the Essential Steps of an NSDS.

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