



Open data, interoperability and linkages to user engagement

Bangladesh Perspective



Presented by

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Outline of the Presentation:

- Open data: definition and segmentation.
- Benefits and challenges of open data.
- Measuring Openness.
- Open Data Inventory (ODIN) results of Bangladesh for 2018-19.
- Data Interoperability: Definition and pathway.
- OGD: Collaborations and Supports
- Recent Initiatives of Bangladesh on data Management and Dissemination

DEFINITION

Open data: Data that can be freely used, modified, and shared by anyone for any purpose.

Open data consists of the following segments:

1.1 Open License



1.2 Access



1.3 Machine Readability



1.3 Open Format



1.1 Open License



“The **work** *must* be in the **public domain** or provided under an open **license**”

Examples of open licenses:

- Creative Commons Licenses (CC0, CC BY 4.0, CC BY 4.0 SA).
- Public Domain Dedication and License (PDDL)
- Canada’s Open Government License (Version 2)
- United Kingdom’s Open Government License (Version 3)

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1.2 Access



“The **work** *must* be **provided as a whole** and at no more than a reasonable one-time reproduction cost, and *should* be downloadable via the Internet **without charge**”

Main criteria:

- Data should be available in bulk download.
- Data should be free of charge.
- Data should be publicly available on the internet.

1.3 Machine Readability



“The **work** *must* be provided in a form readily processable by a computer and where the individual elements of the work can be easily accessed and modified”

Main Criteria:

- Data should be published in XLS, XLSX, CSV, XML or similar formats.

1.4 Open Format



“The **work** *must* be provided in an open format. An open format is one which places no restrictions, monetary or otherwise, upon its use and can be fully processed with at least one free/libre/open-source software tool.”

Main Criteria:

- Data should be published in non-proprietary format such as CSV, XLSX, PDF, DOCX, or similar.

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Benefits and Challenges of Open data

| | Benefits | Challenges |
|----------|--|--|
| Economic | <ul style="list-style-type: none">▪ Reduces costs associated with data requests▪ Increase accountability and decrease redundancy of services.▪ Create jobs and encourage entrepreneurship | <ul style="list-style-type: none">• Finding new revenue streams to replace revenue generated from selling data• Building the technical capacity of staff• Lack of technological resources• Extensive time investment to convert paper/PDF files to open formats |
| Other | <ul style="list-style-type: none">• Increase use and applicability of data.• Increase capacity to monitor development progress• Increase citizens access to information• Raises profile of National Statistical Office and other statistics producers | <ul style="list-style-type: none">• Lack of political will/support• Data sharing and interoperability• Legal barriers• Privacy and security |

Measuring Openness

- Once data is found, ODIN scores how well the data adheres to the open data principles.

OPEN FORMATS



Are the data machine readable and in a nonproprietary format?

BULK/CUSTOM DOWNLOADS



Are the data downloadable in bulk or can a user customize the export file?

METADATA



Are the data accompanied by metadata to help users understand the dataset?

TERMS OF USE



Are the data published under an open license? Does the license have restrictions?

ODIN 2018/19 Results



Bangladesh

National Statistics Office of Bangladesh

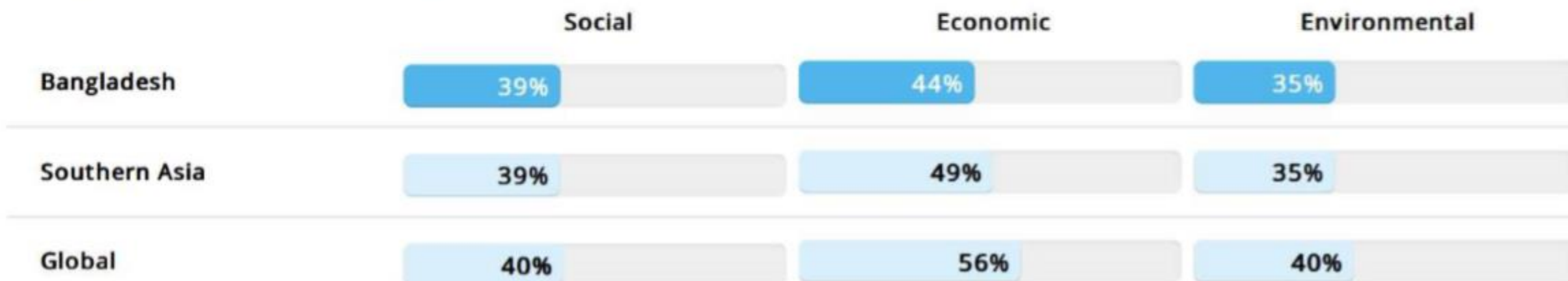
<http://www.bbs.gov.bd>

105 RANK
out of 178

44 COVERAGE
subscore

35 OPENNESS
subscore

SCORES BY MAJOR DATA CATEGORY



DATA INTEROPERABILITY

Data interoperability addresses the ability of systems and services that create, exchange and consume data to have clear, shared expectations for the contents, context and meaning of that data.



Getting the **governance** and **institutional framework** right



Designing **data structures** with users in mind



Standardizing the **data content**



Providing standard **interfaces** to access and work with data

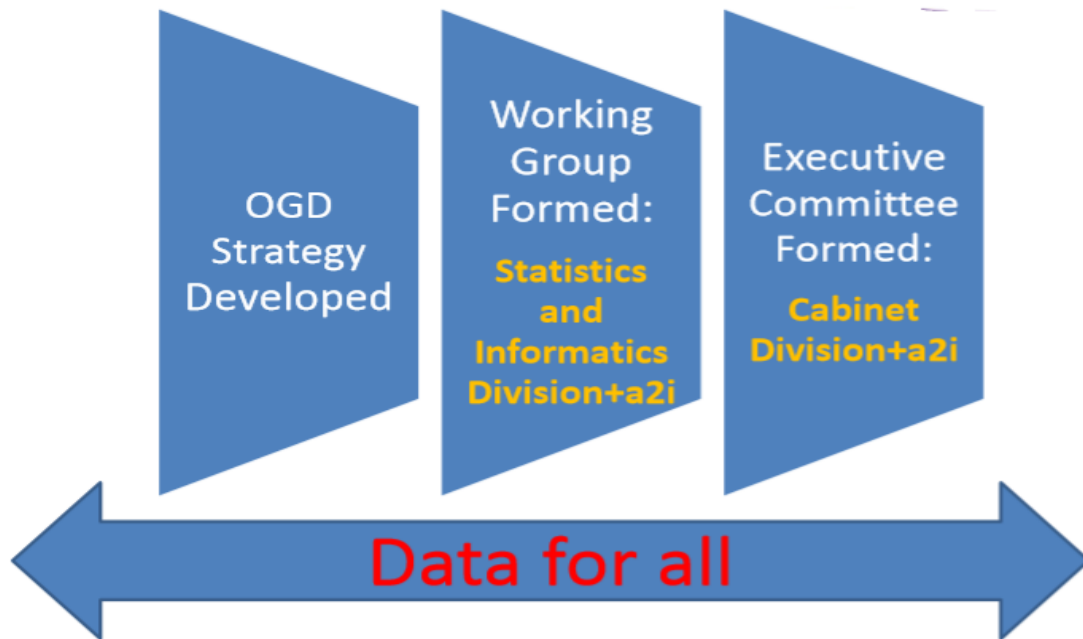


Disseminating **linked open data** for knowledge creation

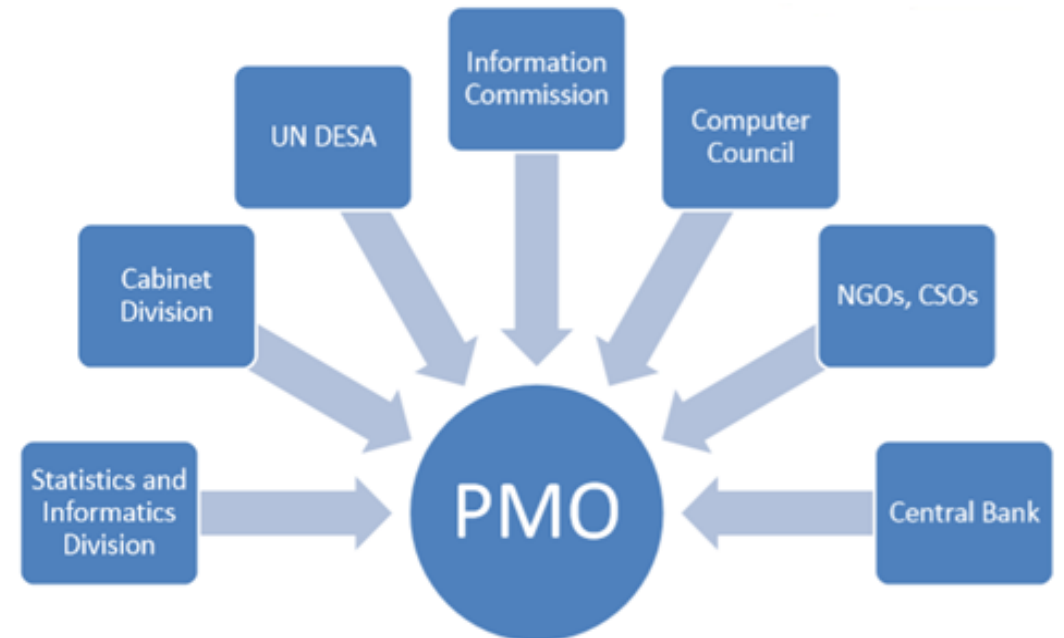
Pathway to data interoperability

OGD: Collaborations and Supports

Our advancements: Legal and Operational



Data Linkage of PMO with other data providers








Recent Progress of Bangladesh on data Management and Dissemination:





- Inter-ministerial committee of 20 members has been formed for SDG implementation and reviewing.
- An office of principal coordinator (SDGs Affairs) established at office of the PM.
- National Data Coordination Committee (NDCC) of 50 members has been formed by the Secretary, Statistics and Informatics Division
- As per the decision of NDCC, Statistics and Informatics Division and BBS jointly organized a 'Consultation Workshop on SDG Tracker' in the participation of NDCC member, BBS's headquarters and field level officials.
- There are 28 seminars / workshops and 3 training courses organized from the Statistics and Informatics Division in order to increase data providing capability for all information-related ministries / divisions / agencies.
- Develop SDG Tracker as data repository for monitoring the implementation of the SDGs.

Data Dissemination: Legal Framework

Statistical Act, 2013 was enacted to support the NSS:





-  Ensuring modern technologies in statistical activities
-  Integrated Central Geographical System
-  Standardization of Statistical Activities
-  Dissemination of all collected and produced statistics by BBS
-  Use of ICT for dissemination and achieving of statistical data

Data sharing arrangements among agencies of the National Statistical System

-  BBS is the main national data provider in the NSS
-  NDPs excluding BBS: publish data in their website
-  Data Sharing up on request without having any standardized platform/format
-  Mostly Administrative data

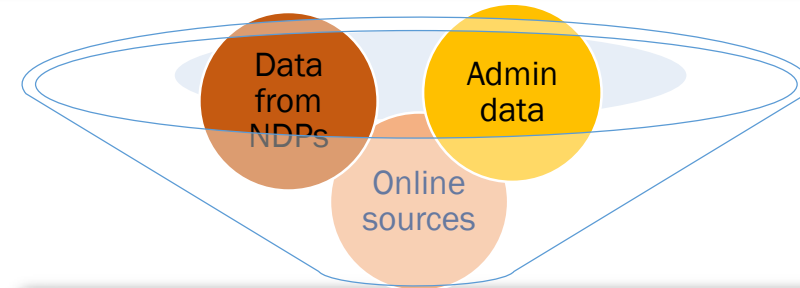
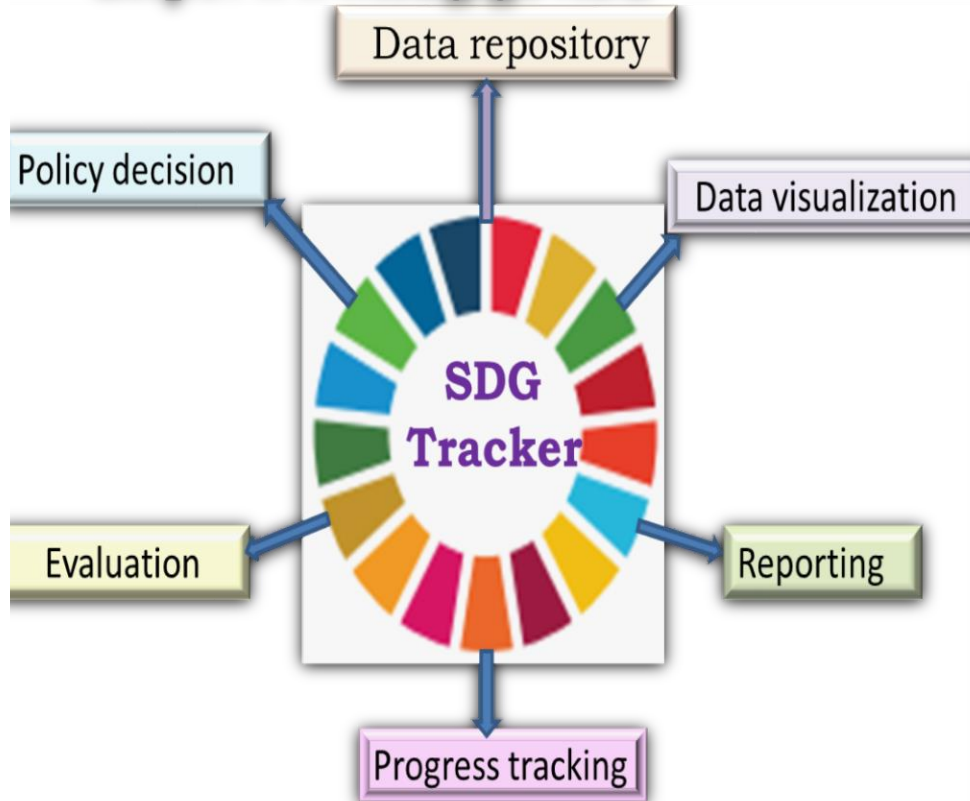
User engagement in dissemination platforms

The primary demand for data currently comes from international monitoring agencies. Therefore, greater attention should be placed on monitoring the use of data and promoting them through targeted national user forums.

-  SDG Tracker will be used to analyze the data for tracking and evaluating SDGs attainment.
-  Online **BDinfo** can be used for customized data dissemination by users
-  **REDATAM** Platform allows users to generate customized tables and graphs from micro data set
-  BBS **Web based GIS application** can be used to view data up to lowest administrative level (Mauza) with map and tables

Government in Action: SDGs Tracker

- To facilitate the results based monitoring system within Government, a **macro-level data repository system** is prepared by a2i of PMO.
- <http://www.sdg.gov.bd>

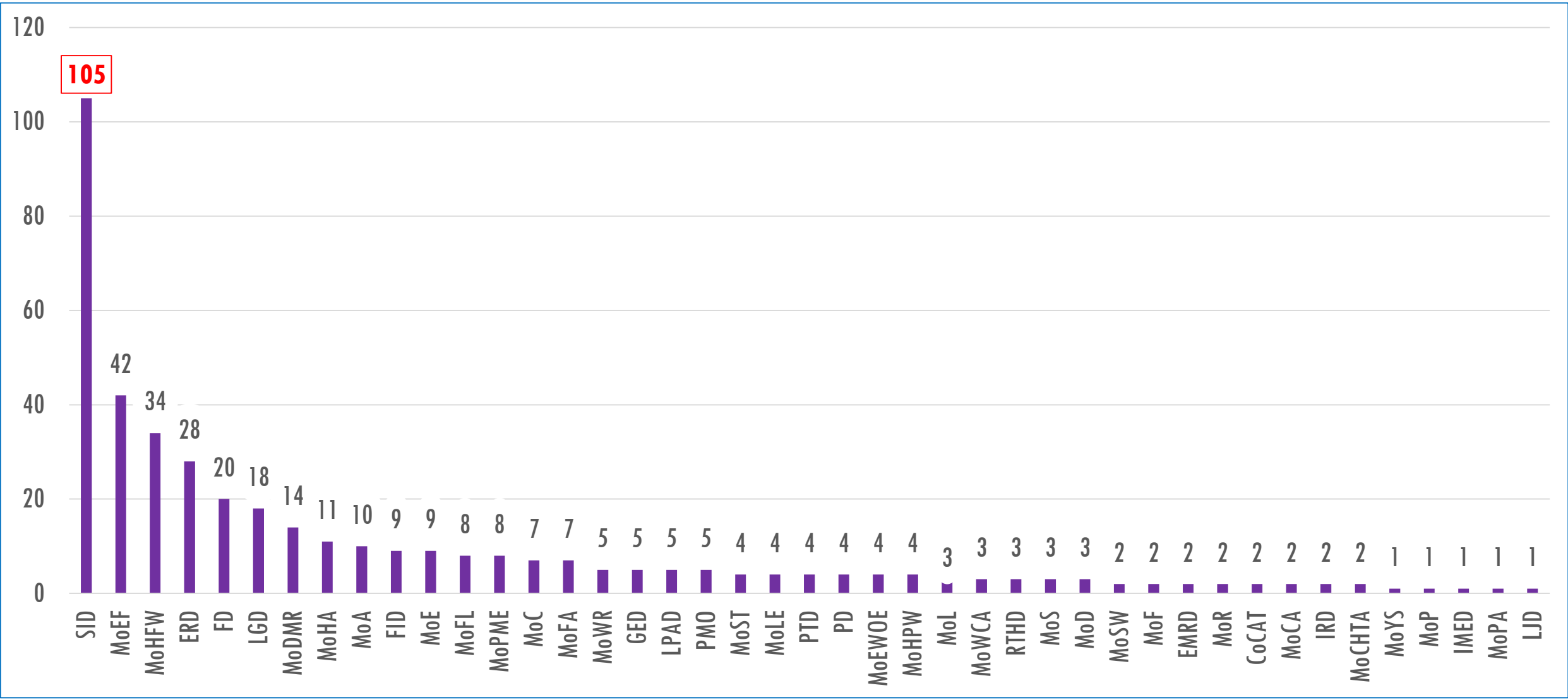


Authentication by BBS



SDG Tracker to analyze the data for tracking and evaluating SDG attainment was launched by HPM on 20/09/2017 at UN.

Assign responsibility of Ministries/Divisions for data generation of SDGs indicators



Consultation with data providing agencies and NDCC

1. Disaggregated data at district and sub district level.

2. Further censuses should be based on No one leave behind thematic area

3. Should have statistics cell

4. Regular data update

5. Training for Data Providers



SDIN Data Categories

Social

- Population & Vital Statistics
- Education Facilities
- Education Outcomes
- Health Facilities
- Health Outcomes
- Reproductive Health
- Gender
- Crime & Justice
- Poverty & Income

Economic

- National Accounts
- Labor
- Price Indexes
- Government Finance
- Money & Banking
- International Trade
- Balance of Payments

Environmental

- Land Use
- Resource Use
- Energy Use
- Pollution
- Built Environment



Thank You