

Common Minimum Metadata Indicators Framework

Economic Statistics Division
Central Statistics Office
Ministry of Statistics & Programme Implementation
Government of India

Inter Ministerial Consultation on Metadata

Inter Ministerial Committee (IMC) to suggest on Data Exchange and Developing an Integrated Statistical Database was set up by MoSPI in 2014.

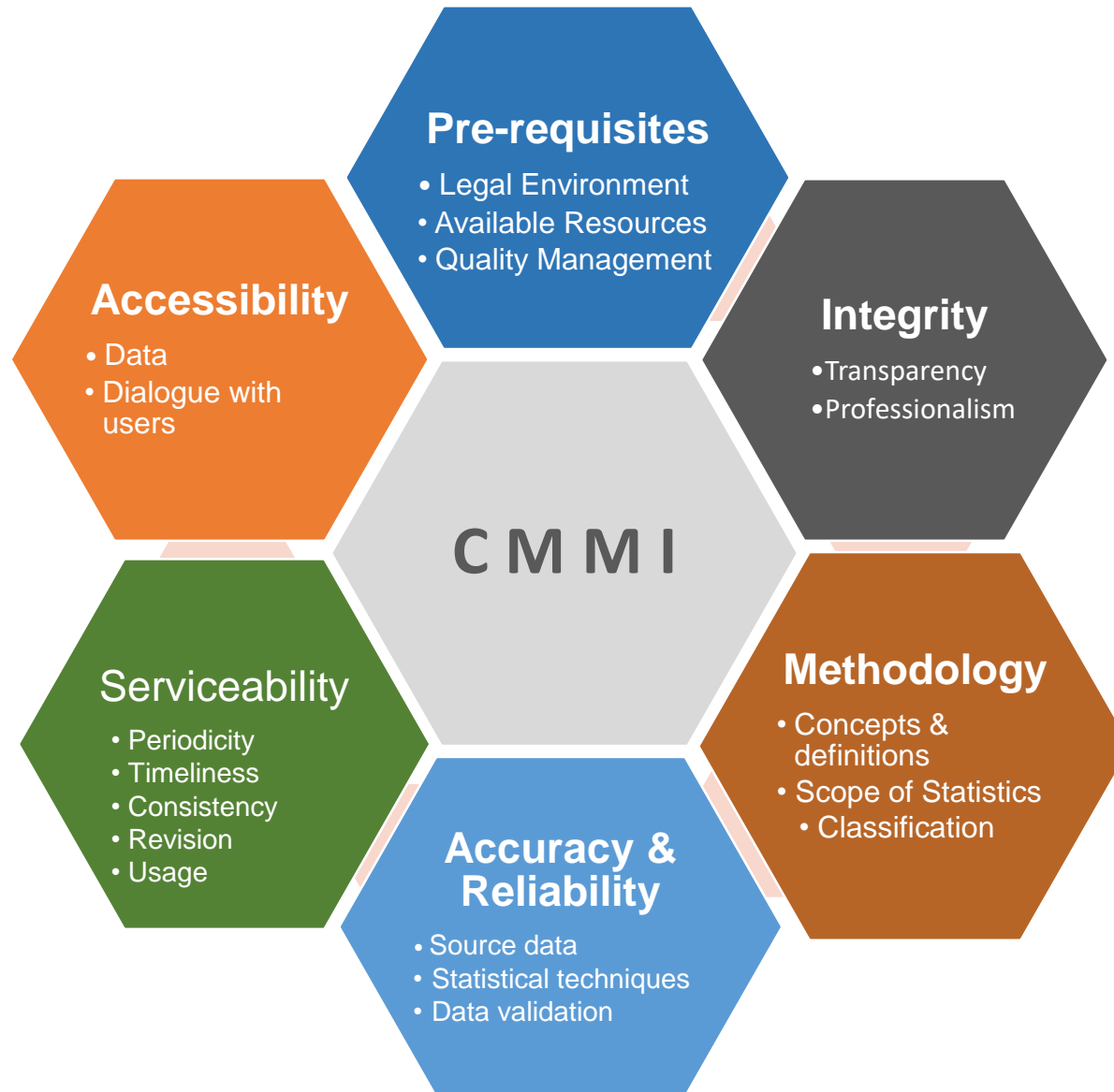
- Need of common metadata framework was felt.
- “Common Minimum Metadata Indicators” (CMMI) framework developed on the lines of IMF’s DQAF.
- CMMI intends to help statistical organizations to choose the right standards, models and approaches in developing their metadata systems.
- Adoption of CMMI is recommended for all economic statistics & indicators in the country.

Common Minimum Metadata Indicators (CMMI)

- It consists of 6 Sections, 18 Sub-categories and 41 Indicators



Structure of CMMI





Pre-requisites

Legal Environment

- Existence of statutory Act/provision for data collection
- Existing provision for sharing of data
- Ensuring confidentiality of data providers

Available Resources

- Institutionalised manpower and resources available for data management
- Sources of funds for statistical activities

Quality Management

- Existing policy of quality or standards



Integrity

Transparency

- Guidelines and Rules concerning
 - Access to statistics for Govt. users
 - Access to statistics for pvt. Users
 - Alignment of statistical policy with organisation policies

Professionalism

- Professional Capacity and existence of dedicated statistical units or centres
- Commentary on selection of data source methodology



Methodology

Concepts and Definitions

- Definitions & meaning of data elements and processes
- Documentation for access to concepts and definitions related to data produced
- Systems of public knowledge and scrutiny

Scope of statistics

- Scope, Coverage and Exclusions

Classification

- Product/Activity/Other classification in use



Accuracy & Reliability

Source data

- Collection mechanism
- Data timeliness
- Norms & specifics of derived products

Statistical techniques

- Estimation procedures
- Forecast or any other statistical techniques in use

Data validation

- Validation techniques
- Monitoring of process elements



Serviceability

Periodicity

- Frequency of data
- Alignment with international recommendations (SDDS)
- Demand based scenario

Timelines

- Timeliness commitment for data release – release calendar
- Alignment with international recommendations (SDDS)

Consistency

- Ensuring temporal and cross sectional consistency
- Comparison with alternative data

Revision

- Basis of revision schedule
- Extent and nature of revision allowed

Usage

- Targeted users and users of data
- Reports/Studies/Projects undertaken for review



Accessibility

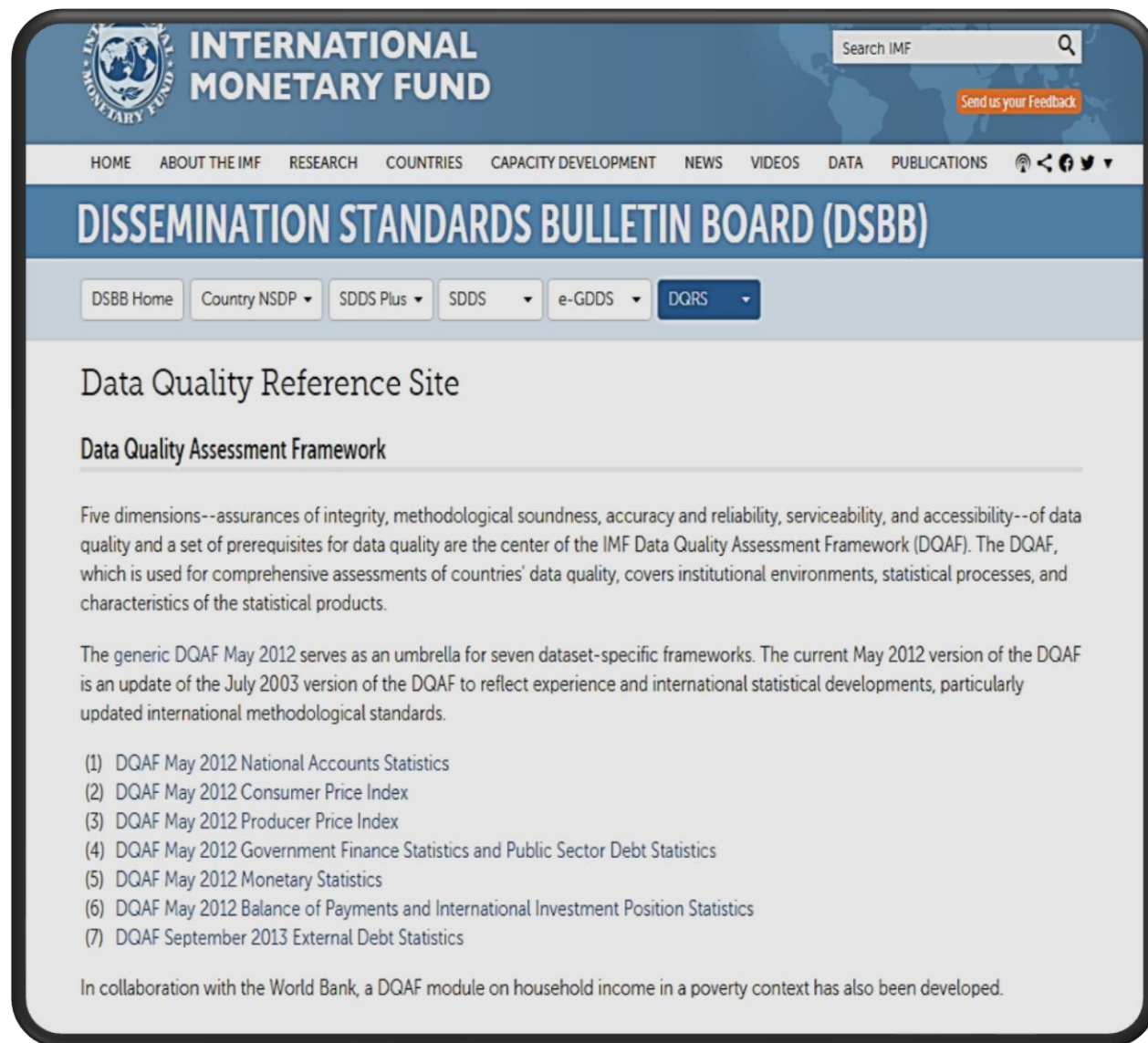
Data

- Presentation and outlay of statistics
- Existence of IT platform for compilation & dissemination
- Storage of data
- Modes of dissemination
- Existence of advanced release calendar
- Clarification on disaggregated /Unit level data

Dialogue with users

- Existence of Mechanism for feedback on Data/Statistics
- Conducting workshop/trainings on a regular basis

Dissemination of Metadata



The screenshot shows the IMF website's DSBB page. At the top, there is the IMF logo and name, a search bar, and a navigation menu with links like HOME, ABOUT THE IMF, RESEARCH, COUNTRIES, CAPACITY DEVELOPMENT, NEWS, VIDEOS, DATA, and PUBLICATIONS. Below the navigation is a large blue banner for the "DISSEMINATION STANDARDS BULLETIN BOARD (DSBB)". Underneath the banner are several dropdown menus for navigation: DSBB Home, Country NSDP, SDDS Plus, SDDS, e-GDDS, and DQRS. The main content area is titled "Data Quality Reference Site" and "Data Quality Assessment Framework". It contains a paragraph explaining the five dimensions of data quality and the role of the DQAF. Below this is a list of seven DQAF frameworks, and a note about a DQAF module developed in collaboration with the World Bank.

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Data Quality Reference Site

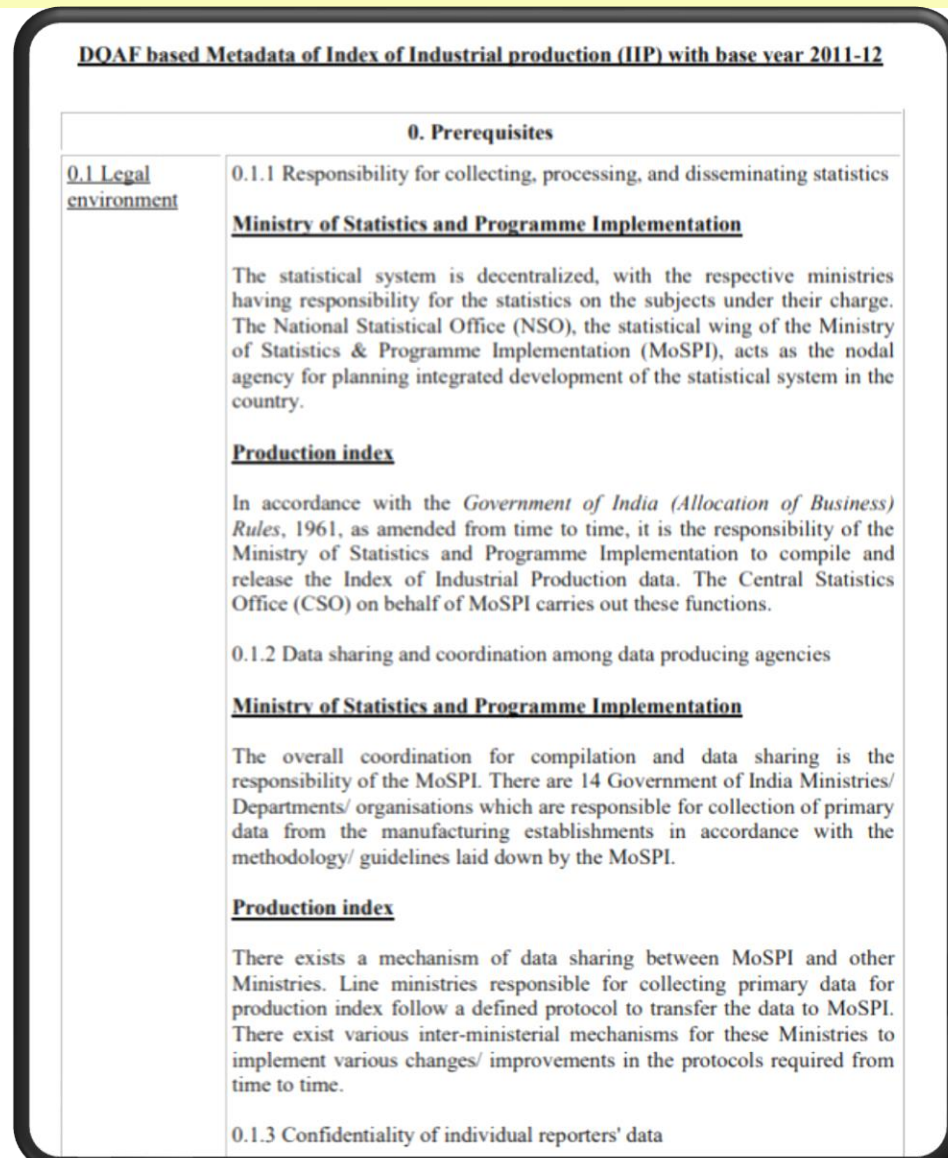
Data Quality Assessment Framework

Five dimensions--assurances of integrity, methodological soundness, accuracy and reliability, serviceability, and accessibility--of data quality and a set of prerequisites for data quality are the center of the IMF Data Quality Assessment Framework (DQAF). The DQAF, which is used for comprehensive assessments of countries' data quality, covers institutional environments, statistical processes, and characteristics of the statistical products.

The generic DQAF May 2012 serves as an umbrella for seven dataset-specific frameworks. The current May 2012 version of the DQAF is an update of the July 2003 version of the DQAF to reflect experience and international statistical developments, particularly updated international methodological standards.

- (1) DQAF May 2012 National Accounts Statistics
- (2) DQAF May 2012 Consumer Price Index
- (3) DQAF May 2012 Producer Price Index
- (4) DQAF May 2012 Government Finance Statistics and Public Sector Debt Statistics
- (5) DQAF May 2012 Monetary Statistics
- (6) DQAF May 2012 Balance of Payments and International Investment Position Statistics
- (7) DQAF September 2013 External Debt Statistics

In collaboration with the World Bank, a DQAF module on household income in a poverty context has also been developed.



The screenshot shows a document titled "DQAF based Metadata of Index of Industrial production (IIP) with base year 2011-12". The document is structured with sections and subsections. The main section is "0. Prerequisites", which is further divided into "0.1 Legal environment" and "0.1.1 Responsibility for collecting, processing, and disseminating statistics". Under "0.1.1", there is a sub-section titled "Ministry of Statistics and Programme Implementation" which describes the decentralized statistical system in India and the role of the National Statistical Office (NSO) and the Ministry of Statistics & Programme Implementation (MoSPI). Below this is another sub-section titled "Production index" which explains the legal basis for the IIP data collection under the Government of India (Allocation of Business) Rules, 1961, and the role of the Central Statistics Office (CSO). The document also includes "0.1.2 Data sharing and coordination among data producing agencies" and "0.1.3 Confidentiality of individual reporters' data".

DQAF based Metadata of Index of Industrial production (IIP) with base year 2011-12

0. Prerequisites

0.1 Legal environment

0.1.1 Responsibility for collecting, processing, and disseminating statistics

Ministry of Statistics and Programme Implementation

The statistical system is decentralized, with the respective ministries having responsibility for the statistics on the subjects under their charge. The National Statistical Office (NSO), the statistical wing of the Ministry of Statistics & Programme Implementation (MoSPI), acts as the nodal agency for planning integrated development of the statistical system in the country.

Production index

In accordance with the *Government of India (Allocation of Business) Rules, 1961*, as amended from time to time, it is the responsibility of the Ministry of Statistics and Programme Implementation to compile and release the Index of Industrial Production data. The Central Statistics Office (CSO) on behalf of MoSPI carries out these functions.

0.1.2 Data sharing and coordination among data producing agencies

Ministry of Statistics and Programme Implementation

The overall coordination for compilation and data sharing is the responsibility of the MoSPI. There are 14 Government of India Ministries/ Departments/ organisations which are responsible for collection of primary data from the manufacturing establishments in accordance with the methodology/ guidelines laid down by the MoSPI.

Production index

There exists a mechanism of data sharing between MoSPI and other Ministries. Line ministries responsible for collecting primary data for production index follow a defined protocol to transfer the data to MoSPI. There exist various inter-ministerial mechanisms for these Ministries to implement various changes/ improvements in the protocols required from time to time.

0.1.3 Confidentiality of individual reporters' data

Key Benefits

Users' Understanding Provide more structured approach to understand and assess the data.

Self Assessment Help Statistics Office to assess the strength and weakness, and trigger to improve the weak areas.

Data Usage Improve interoperability , retrieval, reuse, and exchange of data

T H A N K

Y 😊 U!

Data Quality Assessment Framework (DQAF)

- Rooted in the UN Fundamental Principles of Official Statistics and grew out of the Special Data Dissemination Standard (SDDS) and General Data Dissemination System (GDDS), the IMF's initiatives on data dissemination.
- Identifies quality-related features of
 - governance of statistical systems,
 - Core statistical processes, and
 - statistical products.
- Valuable for at least three groups of users.
 - To guide country efforts e.g., to prepare self-assessments.
 - To guide data users in evaluating data for policy analysis, forecasts, and economic performance.
 - to introduce rigor, structure, and a common language in the assessment of the quality of macroeconomic data.

Quality Assurance Frameworks

UNSD: National Quality Assessment Framework

ESSC: Quality Assurance Framework of the European Statistical System

OECD: Short-term Economic Statistics Timeliness Framework

IMF: Data Quality Assessment Framework