



सत्यमेव जयते

Ministry of Electronics & Information Technology  
Government of India

75  
Azadi Ka  
Amrit Mahotsav

# data.gov in

Open Government Data Platform India

INSTITUTIONAL  
MECHANISM



NDSAP



IMPLEMENTATION GUIDELINES



CONTROLLED VOCABULARY



GODL

DATA  
PROVIDERS



CENTRAL GOVERNMENT



STATE GOVERNMENTS

DATA TECHNOLOGY PLATFORMS



OGD  
PLATFORM



VISUALIZATION  
ENGINE



SAAS  
INSTANCES



EVENTS



COMMUNITY  
PORTAL

## OPEN GOVERNMENT DATA

DATA CONSUMER



DEVELOPERS



INDUSTRY



ACADEMIA



RESEARCHERS



CORPORATE



PUBLIC AT LARGE



GOVERNMENT

USAGES &  
IMPACT



RESEARCH



COLLABORATION



CITIZEN ENGAGEMENT



ACCOUNTABILITY



INNOVATION



TRANSPARENCY



SMART GOVERNANCE



OPEN GOVERNANCE



DECISION MAKING



## OPEN GOVERNMENT DATA INITIATIVE OF INDIA

Data is one of the most valuable assets of modern governments which should be made accessible (or released) in open format to utilize its full potential. The primary purpose of Open Data initiatives worldwide is to help government, industry, academia, businesses and civil society utilize the available digital data to drive innovation for sustainable development.

### **National Data Sharing and Accessibility Policy**

Gazette notified on 17th March 2012

Facilitate proactive Release of Data by the Government Departments/ organizations To facilitate the access to **Government of India owned shareable data and information in both human readable and machine readable forms** through a

network all over the country in a proactive and periodically updatable manner, **within the framework of various related policies, Acts and rules** of Government of India, thereby permitting a wider accessibility and use of public data and information for national planning and development. The Policy is designed so as to apply to all sharable non-sensitive data available either in digital or analog forms, for all the data and information created, generated, collected and archived **using public funds provided by Government of India.**



## OPEN GOVERNMENT DATA PLATFORM INDIA (data.gov.in) - OGD 2.0

Driven by the National Data Sharing and Accessibility Policy (NDSAP), National Informatics Centre (NIC), MeitY has set up the Open Government Data (OGD) Platform India - <https://data.gov.in> for proactive and open access to the data available with various Ministries/ Departments/ Organizations of Government of India. The Platform is one of the initiatives under Pillar 6 (Information for All) of the Digital India initiative. The existing Platform is OGD 2.0 with Micro Services Based Architecture Leveraging Cloud Technology.

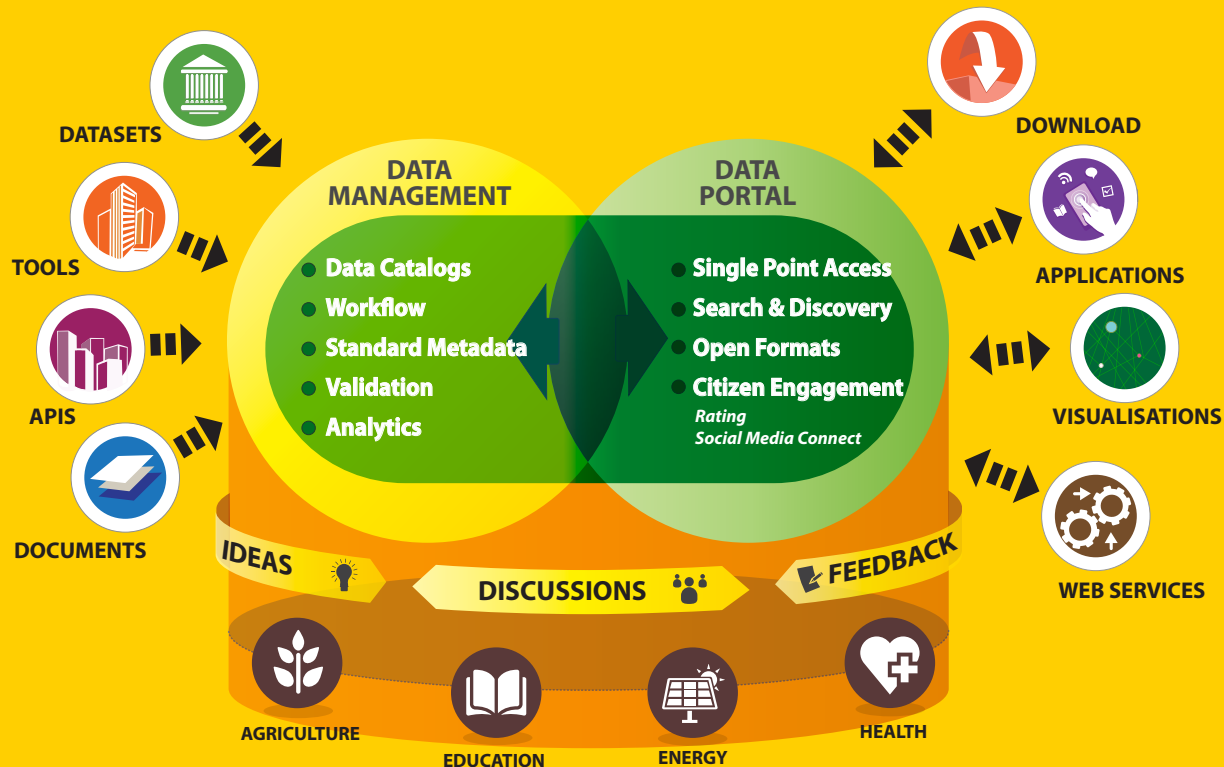
### **SALIENT FEATURES:**

#### **RESOURCES (DATASETS/APPS) CATALOG AS SERVICE**

- Single Window repository of Government Open Data from Ministries/Departments/States
- Nominated Chief Data Officers from government departments publish open data
- Exhaustive search facility with Custom Search API Module
- Preview of Datasets, Bulk Download of Catalog and Subscribe to receive updates
- Embed Catalogs & Widget to Consume/Link filtered set of catalogs
- Datasets Suggestions and Feedbacks on catalogs & resources
- Subscribe Catalogs to receive updates
- Single Sign On to access all OGD and MyGov portals with one registration

#### **VISUALIZATION ENGINE (visualize.data.gov.in)**

- Facilitate to create National, State, District Drill-down & Lat-Long maps besides various charting options viz. bar, line, pie etc.
- Visualizations can be created using Sample Data, User's Own Data or OGD Data Sets (using datasets APIs)
- Analyze mashups and time series data
- User friendly Interface with ease of interacting on with the data
- Dedicated Website for Visualization Engine [visualize.data.gov.in](https://visualize.data.gov.in)
- Visualization Wizard facility for easy creation Integration with Bharat maps
- Registered Users can Save / Edit/ Delete/ Embed/ Clone Visualization
- Visualization Gallery showing - VODs (Visualization of the Day) and All Visualizations



## APPLICATION PROGRAMMING INTERFACES (APIs) AS A SERVICE

Datasets APIs are available as a Service - Users can consume Datasets through APIs, this will help in updation of datasets automatically, hence helpful in developing innovative applications

OGD Platform facilitates government departments for automated contribution of open datasets through APIs/web-services for regular, up-to-date and convenient data publishing

## COMMUNITY ENGAGEMENT PORTAL ([community.data.gov.in](http://community.data.gov.in))

OGD Community Portal for publishing of Blogs, Visualization, Info-graphics by registered users

Users can also submit Apps those have used OGD Datasets in Apps Gallery



## HACKATHONS, CHALLENGES AND EVENTS ([event.data.gov.in](http://event.data.gov.in))

Portal to manage hackathons, meetups, conferences, seminars, workshops, challenges, etc. Some of these events are listed below:

- | OGD National Hackathon- #OpenGovDataHack
- | Stake Holders' Consultation and Seminars
- | Sector specific CDO Workshops
- | 12th Plan Hackathon
- | In Pursuit of an Idea
- | #OpenDataApps Challenge
- | CMA Hackathon
- | Community Interaction
- | National Conference on Open Data & Open API
- | Code for Honour Awards
- | Inclusive Web Programming
- | Open Data Apps Challenge
- | And Many More ...



## GOVERNMENT OPEN DATA LICENSE – INDIA (GODL)

Government Open Data License (GODL) – India has been released and Gazette notified on February 13, 2017. This is a one of its kind License that allows users to consume datasets available on OGD platform for commercial as well as non-commercial purposes. Detailed terms and conditions of License are available with scan of this QR code or can be accessed at: <https://data.gov.in/government-open-data-license-india>



### Model-1

Open format Datasets can be directly be published on data.gov.in  
A dedicated URL will be provided for the State (Eg: data.gov.in/states/Name of the State)

### Model-2

States can have their own data portal for publishing of Open Datasets as an exclusive instance of data.gov.in through Software as a Service (OGD-SaaS) Model

#### Steps for on boarding (Ministry/Departments)

- Secretary/Additional Secretary of Ministry/ Department will nominate a Chief Data Officer (at the rank of JS) by filling the CDO nomination form
- PMU will create CDO account
- CDO to create Data Contributor account and start publishing datasets

#### Steps for onboarding (States/ULBs)

- Acceptance letter from the State for on-boarding
- Setting up of governance structure by the State
- State to submit SaaS Instance Form for activating instance
- Making the Open Data Portal Instance available by NIC
- State Government Departments/Entities to nominate a senior officer to additionally function as Chief Data Officer (CDO) for the Department/Entity
- CDO would drive Identification and Publishing of all Potential Datasets for public good

#### Launched SaaS Instances

[smartcities.data.gov.in](http://smartcities.data.gov.in)

[karnataka.data.gov.in](http://karnataka.data.gov.in)

[sikkim.data.gov.in](http://sikkim.data.gov.in)

[punjab.data.gov.in](http://punjab.data.gov.in)

[odisha.data.gov.in](http://odisha.data.gov.in)

[tn.data.gov.in](http://tn.data.gov.in)

[kerala.data.gov.in](http://kerala.data.gov.in)



### OGD MILESTONES



National Data Sharing and Accessibility Policy (NDSAP) Gazette Notified



Launch of data.gov.in



Launch of Visualization Engine



Data release through APIs



Launch of Community portal



Open Data Portal of Tamil Nadu, Odisha, Sikkim & Surat launched by using OGD SaaS



Launch of Exclusive Events Portal



Government Open Data License (GODL) Gazette Notified



Community and citizen engagement through hackathons #OpenGovDataHack, 12th Plan Hackathon, In Pursuit of an Idea, #OpenDataApps Challenge, etc.



Launch of Smart Cities Data Portal



Launch of OGD 2.0 - MicroServices Based Architecture Leveraging Cloud



### OPEN DATA CHAMPION

'Open Data Champion' award instituted under Digital India Awards to honor the exemplary work done by Ministry/ Departments towards releasing of open data on OGD Platform.



### CONNECT WITH US

NDSAP Programme Management Unit (PMU)



3<sup>rd</sup> Floor, National Informatics Centre, A-Block,  
CGO Complex, Lodhi Road, New Delhi, 110 003 INDIA



[ndsap@gov.in](mailto:ndsap@gov.in)



[/dataportalofindia](https://www.facebook.com/dataportalofindia)



[/DataPortalIndia](https://twitter.com/DataPortalIndia)

**Government of India**  
**Data Quality Assurance Division**  
**National Statistical Office**  
**164, Gopal Lal Thakur Road, Kolkata-108.**  
**Phone No. 2577-1128**

-----

***NSS 76th Round***  
***Final Multiplier-posted unit-level data***  
***for Schedule 1.2 of NSS 76th round.***

- A) Data for Sch. 1.2 (Drinking Water, Sanitation, Hygiene and Housing Condition).  
There are 9 files belonging to 9 different levels as per layout (Data\_Layout\_NSS76\_120.xlsx).

Data Files

Data File name	No. of records
R76120L01	106838
R76120L02	466527
R76120L03	106838
R76120L04	106838
R76120L05	106838
R76120L06	106804
R76120L07	106804
R76120L08	106804
R76120L09	106992
Total	1321283

Record length for data is 139.

Note for users:

- (1) These are text data with fixed record-length of 139 characters. First 126 bytes are data, next 3 characters are number of first stage units surveyed within a sector x state x stratum x substratum (NSC). Next 10 bytes are weight or multiplier for the sample (MLT). Last byte is for Newline character.
- (2) The Layout of data is given in the MS Excel-file Data\_Layout\_NSS76\_120.xlsx.
- (3) For generating any estimate, one has to extract relevant portion of the data, and aggregate after applying the weights.
- (4) Weights (or multipliers) are given at the end of each record from 130th byte onwards. The weights (multipliers) are Second Stage Stratum (SSS) wise, details of which are as given below:

## NSC and FSU-wise weights

-----  
NSC = Bytes 127-129 (3 bytes)

MLT = Bytes 130-139 (10 bytes, assumed two places of decimal)  
-----

All records of a second stage stratum(SSS) will have same weight figure.

In case of those Blocks/Levels, where Item/Person Serial No. is not applicable, the field is filled up with "00000".

(5) In the value fields (in Rs. or quantity or area etc.) only the numeric figure is given in data file. The decimal point is to be assumed after looking at the type of that field in the printed schedule and text data layout.

(6) Common Primary Key for identification of a record for any schedule is:

FSU Serial Number	= 4(5) (i.e., offset = 4th byte, length = 5 bytes)
Second Stage Stratum Number	= 30(1)
household Number	= 31(2)
Level Number	= 33(2)
Item Code	= 35(5)

## (7) List of Documents

- |  |                                      |
|--|--------------------------------------|
| a) General Information   | ----- README76_S120.doc              |
| b) Text Data Layout  | ----- Data_Layout_NSS76_120.xlsx     |
| c) Blank schedule 0.0  | ----- Schedule_0.0.pdf               |
| d) Blank schedule 1.2  | ----- Schedule_1.2.pdf               |
| e) Instructions Manual   | ----- NSS_76_ins_Ch1-4.pdf           |
| f) Estimation procedure note and related tables for stratum composition for 69th round | ----- Estimation_Procedure_NSS76.pdf |

\*\*\*\*\*



Government of India  
Ministry of Science & Technology  
Department of Science & Technology  
(Big Data Initiatives Division)

Call for proposals under **Big Data Initiatives (BDI)** programme

**The Scheme:** Department of Science & Technology (DST) has recently initiated a new programme to promote Big Data Science, Technology and Applications. For fostering research in this high potential emerging area, a BDI programme support scheme is launched. Following are broad streams under which financial support shall be provided to quality proposals in Grant-In-Aid mode.

- (a) Support for R&D projects
- (b) Support for Establishment of Center for Excellence in Big Data Analytics, Predictive technologies, Cyber Security etc
- (c) Support for national level Conferences/ workshops/ Seminars/ brain storming sessions etc
- (d) Support for Training programmes: In-house training programmes for Faculty/UG/PG/ Doctoral students

Big Data Initiatives Division, solicit proposals in any aspect of above mentioned categories with emphasis on 5Vs (Volume, Velocity, Variety, Value and Veracity) relevant to variety of data that contribute to the Big Data challenges. This includes but is not limited to the following:

1. **Big Data Science & Technology**
  - (a) Scalability of Machine Learning Algorithms
  - (b) Data streaming & Processing
  - (c) Dimensionality Reduction
  - (d) Analysis of Unstructured/Semi-structured data
  - (e) Management of Uncertainty and Ambiguity
  - (f) Visualization & Visual Analytics
  - (g) Security & Privacy issues
  - (h) Novel Theoretical Models

- (i) New Computational Models
- (j) Data & Information Quality and New Data Standards.

## **2. Big Data Infrastructure**

- (a) Data Fusion & Integration
- (b) Architectures for Processing
- (c) Cloud/Grid/Stream Computing
- (d) High Performance/Parallel Computing Platforms
- (e) Autonomic Computing and Cyber-infrastructure
- (f) System Architectures, Design and Deployment
- (g) Energy-efficient Computing
- (h) Programming Models
- (i) Environments for Cluster
- (j) Cloud & Grid Computing to Support Big Data
- (k) Software Techniques & Architectures in Cloud/Grid/Stream Computing
- (l) Big Data Open Platforms
- (m) New Programming Models
- (n) Software Systems to Support Big Data Computing

## **3. Big Data Search, Mining and Management**

- (a) Search & Mining of variety of data including scientific, engineering, social, sensor & multimedia
- (b) Algorithms & Systems for Big Data Search
- (c) Distributed & Peer-to-peer Search
- (d) Big Data Search Architectures, Scalability & Efficiency
- (e) Data Acquisition, Integration, Cleaning & Best Practices
- (f) Visualization Analytics for Big Data
- (g) Computational Modeling & Data Integration
- (h) Large-scale Systems & Social Media Systems
- (i) Cloud/Grid/Stream Data Mining-Big Velocity Data
- (j) Link & Graph Mining, Semantic-based Data Mining
- (k) Mobility and Big Data
- (l) Multimedia and Multi-structured Data-Big Variety Data

## **4. Big Data Security & Privacy**

- (a) Intrusion Detection
- (b) Cyber security and Gigabit Networks
- (c) Anomaly Detection in Very Large Scale Systems
- (d) High Performance Cryptography
- (e) Visualizing Large Scale Security Data
- (f) Threat Detection using Big Data Analytics
- (g) Privacy Threats of Big Data



- (h) Privacy protection in Big Data Collection/Analytics
- (i) Challenges for Big Data Security & Privacy
- (j) User Studies for any of the above
- (k) Sociological Aspects of Big Data Privacy

5. **Big Data Applications**

- (a) Complex Big Data Applications in Science, Engineering, Medicine, Healthcare, Finance, Business, Law and Education
- (b) Indian Traditional Knowledge
- (c) Transportation
- (d) Retailing, social media and Telecommunication
- (e) Big Data Analytics in Small Business Enterprises (SMEs)
- (f) Big Data Analytics in Central and State Governments, Public Sector and Society in General
- (g) Real-life Case Studies of Value Creation through Big Data Analytics
- (h) Big Data as a Service
- (i) Big Data Industry deployments & Standards and Experiences of Big Data Govt Deployments/ Projects.
- (j) **Some of the Research topics on which proposals are also solicited, but not limited to, under Big Data-Applications are**
  - Big Data: River Network optimisation - A data driven analytics approach.
  - Understanding Urban/ Rural people perceptions on immunisation
  - Online Signals for Risk Factors of Non-Communicable Diseases (NCDs)
  - Characterizing human behavior during floods through the lens of mobile phone activity
  - Mining Indian Tweets to Understand Food Price Crises
  - Advocacy Monitoring through Social Data: Women and Children Health
  - Analyzing Online Content for Insight on Women and Employment in India
  - Analytics and Understanding social Conversations through Big Data
  - Unemployment analysis through Social Media
  - Monitoring Food Security Issues Through News Media and Analytics
  - India and State-wise, region wise Snapshots of mental Health/ Wellbeing - Mobile Survey
  - Daily Tracking of essential Commodity Prices in India through data mining and analytics
  - Twitter and Perceptions of Crisis-Related Stress
  - Population migration and analytics
  - Food and Nutrition Security Monitoring and Analysis
  - Monitoring Household Coping Strategies During Complex Crises
  - Economic crisis, tourism decline and its impact on local dependents
  - Impacts of the financial crisis on health and poverty in India
  - Impact of the financial crisis on primary schools, teachers and

parents

- A Visual Analytics Approach to Understanding Poverty Assessment through Disaster Impacts in India
- Monitoring the impact of the global financial crisis on crime in India
- Urban crime pattern analysis, unemployment, education, social hierarchy and economic linkages

**Who can Apply:** Academicians, Scientists, Technologists and other practicing researchers from recognised academic, research institutions and registered scientific societies etc may submit their proposals.

**Approval mechanism:** All proposals received shall first scrutinized and screened by BDID, short listed ones shall be referred to Peer review comments, those who scored above standard threshold limits will be called for a technical presentation before Project Advisory and Monitoring Committee (PAMC). Based on recommendations of PAMC, proposals shall be taken up for possible support. Private funded institutions participation shall be based on agreed upon cost sharing basis.

**How to apply:** It is a throughout the year programme and interested can submit their proposals any time of the year in a standard DST prescribed format. For more information and for formats, visit [www.dst.gov.in](http://www.dst.gov.in)

**Proposal submission:** Proposals completed in all aspects, A **soft copy** by email to [krmm at nic dot in](mailto:krmm@nic.in) and corresponding **single Hard copy** by post to

(Dr K R Murali Mohan)  
Head, Big Data Initiatives Division  
Hall-C, Room No:1  
Department of Science & Technology  
Ministry of Science & Technology  
Technology Bhavan, S J Marg  
New Delhi-110 016