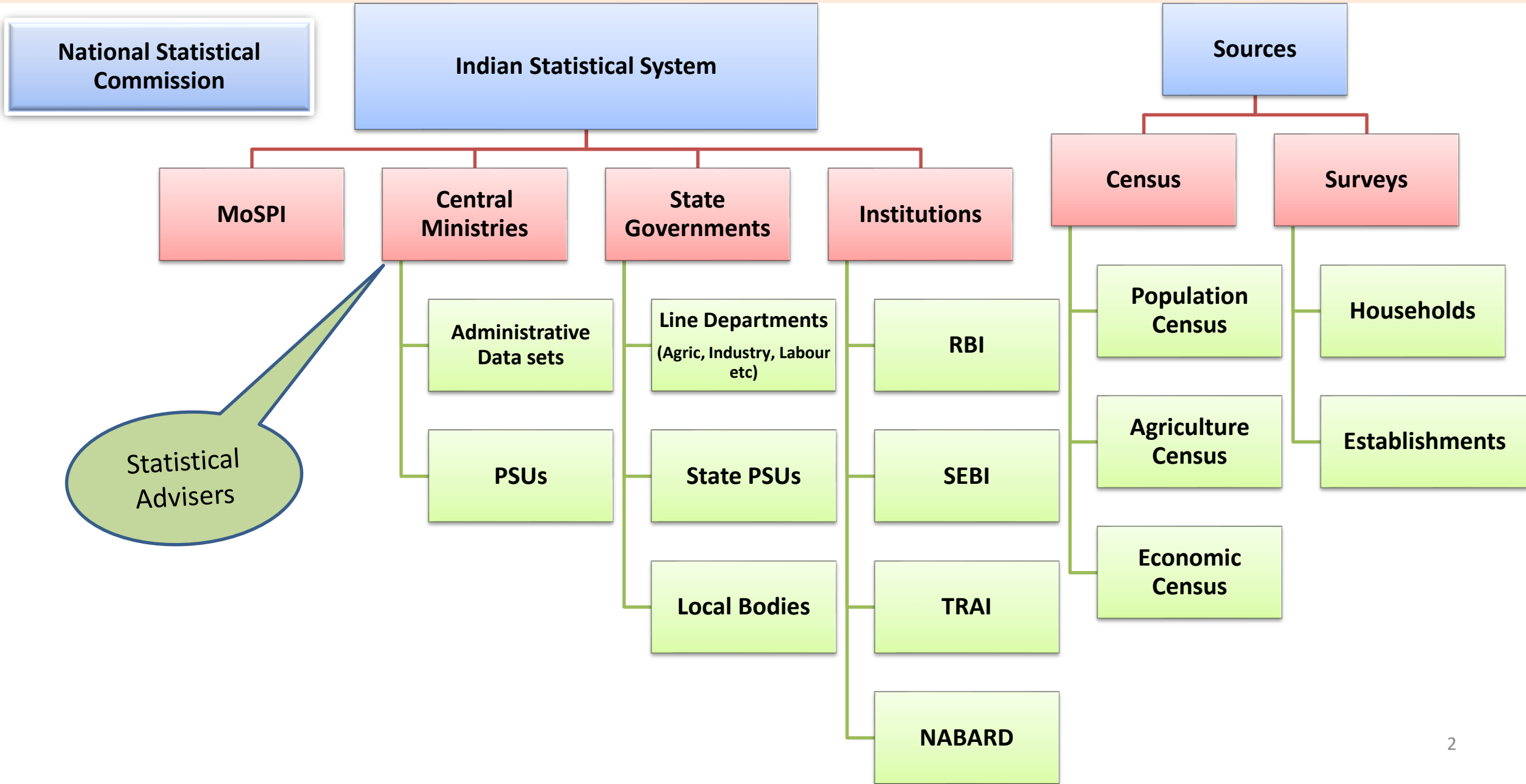


**Ministry of Statistics & Programme Implementation (MoSPI)
Government of India**

**Indian Statistical System:
Use of Technology**

www.mospi.gov.in

Indian Statistical System - broad



Structure of the Indian Statistical System

- Laterally decentralized among the Ministries/ Departments at Central Govt level, and vertically decentralized, between the Centre and the States
- MoSPI is the nodal Ministry of the planned and integrated development of Indian Statistical System
 - It is the NSO, and also responsible for some other activities
- NSO responsible for
 - Guidance to Central Ministries/ Depts. And State Directorates of Eco. & Stats.
 - Facilitating development of norms & standards, evolve concepts, definitions, and methodology of data collection and dissemination
 - Compilation of some major data products

Major Data Products of NSO

- National Account Aggregates (GDP/ GVA)
- Index of Industrial Production (IIP)
- Consumer Price Index (CPI)
- Formal Sector Employment Statistics
- SDG Monitoring Framework
- National Sample Surveys

Annual Survey of Industries (ASI)

- Annual Establishment survey : 65000 – 70000 units
- Record based survey – Balance Sheets, P&L A/c, Ledgers, etc.
- Data collection web-portal from 2012-13
 - Data submission by Factories directly, or by Govt. field functionaries
 - Provision for online and offline
 - 150+ validation checks at data entry stage
 - 2nd/ 3rd level scrutiny – at backend
 - In case of errors/ doubts, entries referred back through web-portal
- through a Apart from processed Summary and Detailed results, anonymised unit-level data released through website

Index of Industrial Production (IIP)

- Based on secondary data from 14 major Govst. source agencies
- Most of these agencies maintain web-based data collection systems for obtaining data from producing units
 - Dept. of Fertiliser, Dept. of Trade & Industry, Indian Bureau of Mines, Tea Board, Central Electricity Authority, Dte. of Sugar & Edible Oils, o/o Textile Commissioner
- Other source agencies depend on returns submitted by production units through email or post
 - Sent to MoSPI through email
- Data not passing validation checks referred back to source agencies through email
- Compilation of IIP through standard computing software applications (Excel)
- Dissemination through website
 - Summary results
 - Item level indices for 407 item groups

National Account Aggregates

- Large no. of major source agencies > 100
- Flow of data from source agencies
 - Through emails,
 - Through manual web-searches,
 - Analysis of Physical documents– Govt. budget documents
- Special compilation done for NSO by a few agencies – in r/o data of huge data sets
 - Issues of sharing of tax data
 - Inadequate IT infrastructure with NSO to handle large data sets
 - Includes data of Corporate Sector, Goods & Services Tax, Income Tax & other taxes
- Overall National Accounts compilation done through use of standard data processing or computing applications (Access, Excel)

Corporate Statistics

- 1.7 million corporate entities registered in India
- 1.1 million active (filing returns at least once in 3 years)
- Annual Returns filed electronically with Min. of Corp Affairs (MCA)
 - By large-sized cos. in digital format
 - By small-sized cos. partly in digital, partly in non-searchable pdf
- Main identifier is corporate identification number (CIN)
- Unit level digital data on select parameters shared by MCA with NSO
 - NSO processes data for estimating corporate sector's contribution to the economy for National Accounts

Goods & Service Tax (GST)

- More than 12.5 million enterprises registered under GST Act
- Returns are filed monthly
- A gigantic IT network is in place for processing GST returns
- GSTN number is the identifier
- Network keeps track of taxes to be paid after the adjustment of input taxes
 - This is done with matching invoices of buyer and sellers
- A lot of data is also auto-populated
- Artificial intelligences (AI) is being used to verify claims by the enterprises
- Data processed by GST Network authorities for NSO's national accounts need

Income Tax and other Taxes

- Compiled Data made available for National Accounts purposes
- AI is being used for checking consistency of same data filed to various authorities
 - for instance turnover, inputs, invoices
- Data also being triangulated from various sources - the corporate, GST and income tax to cross check filings
- Shell companies are being identified through extensive use of IT

Use of Technology by some other major Central Ministries

O/o Registrar General & Census Commissioner of India

- A Digital Library for Census data including thematic maps established
- For Census 2021, methods of data capturing through mobile application and online transmission of data through network have also been introduced
- Online registration facility for birth and death have been introduced across the country

Use of Technology by some of the States

Rajasthan

- Created a State Business Register for registration/ renewal and for other related works by the all entrepreneurs.
- Notification of State Government issued in September 2016
 - mandated all old registered and new entities prior to get Business Registration Number (BRN) through prescribed process
 - Requisite approvals – electricity, etc. – not granted without BRN
- Robust register facilitating many statistical and other activities

Use of Technology by some of the States Contd...

Maharashtra

- Developed a Web Portal for MPSIMS (Maharashtra Plan Schemes Implementation and Monitoring System)
- New Initiatives:
 - Integration of MPSIMS with BEAMS (Budget Estimation, Allocation and Monitoring System)
 - Monitoring fund allocation of Centrally sponsored schemes
 - Mapping of Plan schemes to SDG
 - Allocation for Gender and Child Budget of plan schemes

Challenges in adoption of Technology in Indian Statistical System

- Issues of convergence and interoperability of data existing in silos
- Institutional, Legal and Policy framework
- Augmentation of regular manpower – numbers and skill set
- Coordination with Central Ministries/ States/UTs

Reform Initiatives of MoSPI

National Integrated Information Portal

- National Integrated Information Portal / Data Warehouse for official statistics
- Digital repository for all official statistics with homogenized meta-data
- Facilitate interoperability across systems through Data Sharing Protocols
- Enable a high-end platform for data analytics and contemporary tools
- Dashboards for socio-economic indicators for real time monitoring
- Now-casting of macro-economic indicators

Generalized Survey Solution (GSS)

- Being developed to
 - Reduce time in data processing
 - Developing manpower through Training Module
 - Improve data quality -
 - Data validation while data collection
 - Real-time data validation
 - Para-data analysis for effective field operations management
 - Timely feedback to addressing technical/ administrative issues

Institutional and Policy Framework

- National Policy on Official Statistics (NPOS) being finalized as a guiding framework
- National Statistical Commission proposed to be set up with statutory backing

Thank You