

# DATA AND ITS ROLE IN GOVERNANCE

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# DEFINITION OF DATA

- Facts and figures collected together for reference and analysis.
- In computing terms, data is information that has been translated into a form that facilitates movement or processing.

# DEFINITION OF BIG DATA

- Extremely large data sets that may be analysed computationally to reveal patterns, trends, associations relating to human behaviour and interactions
- Refers to gathering, analysing and storing data sets that are too large and complex for traditional data processing and data management application software (Wikipedia)

# DEFINITIONS OF BIG DATA (CONTD)

- Big data is a combination of structured, semi-structured and unstructured data collected by organizations that can be mined for information and utilised in machine learning projects, predictive modelling and other advanced analytics applications
- Defined by three 'V'- volume, velocity and variety

# SOME BIG DATA USAGES

- Discovering consumer shopping habits
- Personalised marketing
- Finding new customer leads
- User demand prediction for ridesharing companies
- Monitoring health conditions through data from wearable's
- Personalised health care for cancer patients

# SOME COMPANIES USING BIG DATA

- GOOGLE
- FACEBOOK
- TWITTER
- AMAZON
- FLIPKART

# BIG DATA APPLICATIONS IN THE GOVERNMENT SECTOR

- Provides Government with the necessary tools to develop strategies on how to effectively implement programmes such as poverty alleviation, food security, etc,
- Monitors tax compliance, maintenance of internal security, tracking transactions in GST implementation
- ✓ For example, Govt. creates databases for such as PAN for taxpayer identification and monitoring bank transactions

# EXAMPLES OF BIG DATA APPLICATIONS IN GOVERNMENT

- Cyber security and intelligence
- Crime prevention and prediction
- Pharmaceutical drug evaluation
- Scientific research
- Weather forecasting
- Traffic optimisation
- Tax compliance



# SOME EXAMPLES OF BIG DATA USAGES IN THE INDIAN GOVT

- CENSUS (Under Registrar General and Census Commissioner of India)
- PAN CARD
- Aadhar UID
- GST
- NCB DATABASE
- INDIAN METEOROLOGICAL DEPARTMENT
- ELECTION COMMISSION OF INDIA

# EXAMPLES OF BIG DATA BEING UTILISED IN SOME PROGRAMMES IN MEGHALAYA

- AADHAR SEEDING (Beneficiary centric)FOR
  - ✓ SCHOLARSHIPS
  - ✓ TPDS BENEFICIARIES
  - ✓ MNREGA PROGRAMMES
- GIS DATA FOR
  - ✓ IMPLEMENTATION OF THE RIGHT TO EDUCATION ACT 2019

# ROLE OF BIG DATA IN THE IMPLEMENTATION OF RTE, 2009 IN MEGHALAYA

- Access to elementary schools is the overriding objective of RTE 2009 Section 6 of the Act provides that ‘the appropriate government and local authorities shall establish in the area or limits of a neighborhood, a school where it is not already established within 3 years of commencement of the act...’
- A neighborhood school is defined as a school located within a defined area as per laid down norms viz. a LP School should provide access to all children in the age group of 6 to 12 years living within 1 km of the school and which will be the designated neighborhood of a village or a habitation for the purpose of providing access

# ROLE OF BIG DATA IN THE IMPLEMENTATION OF RTE, 2019 IN MEGHALAYA

- Prior to the approval of the RTE Rules, GIS mapping was initiated and completed in 2010
- Generated reliable data on the number of existing LP and UP schools in the entire state
- When the RTE was enforced from 2011 onwards, School neighborhoods were quickly delineated and new schools set up where required
- Created a baseline data which was critical for implementation of the RTE in 2011 in other interventions when the SSA programme was subsumed
- Guided the formulation of effective action plans and budgets submitted to Govt. of India for approval

# BIG DATA (AADHAR)AND MNREGA IMPLEMENTATION

- FACILITATES RELIABLE IDENTIFICATION OF BENEFICIARIES
- ENSURES THAT THE BENEFITS ARE NOT DIVERTED ELSEWHERE
- FACILITATES ACCURATE MONITORING AND EVALUATION
- PROVIDES A RELIABLE BASELINE DATA YOY.

# BIG DATA (AADHAR)AND MNREGA IMPLEMENTATION

- BESIDES LISTING PHYSICAL ACHIEVEMENTS CAN BE UTILISED FOR OUTCOME MEASUREMENT
- ✓ Mapping of bank accounts and the volume and scale of transactions of the beneficiary to determine his/her future entitlement and eligibility vis a vis income levels
- ✓ Assess the productivity of created assets and impact on the quality of life in the surrounding area and mean income levels

# IMPORTANCE OF DATA IN PLANNING AND CONTROL

- Two main functions that enable management (Depts) to plan for the future and assess implementation are planning and control – establishing goals and evaluating the accomplishment of such goals respectively
- The budget document is a typical example of a method employed for exercising planning and control where financial and physical targets are approved for one financial year

# IMPORTANCE OF DATA IN PLANNING AND CONTROL

- Baseline data are the basis for growth projections
- Annual Action Plans and developmental schemes are formulated on the current data figures
- Budgets are finalized based on inputs and expenditure prioritized based on existing available fiscal resources besides manifestos of the ruling party of the day
- Targets are established and achievement reviewed through meetings and also course correction



# IMPORTANCE OF DATA FOR GOVT. OFFICERS

- Guides the formulation of schemes and plans at field level which eventually becomes the basis for formulation of Annual State Plans and Centrally Sponsored Schemes
- Baseline data is reliable and serves as a reference point for assessing performances, outcome deliveries and output measurements
- Critically important for generating reliable baseline data for budget formulation and management at the Secretariat level

# IMPORTANCE OF DATA FOR GOVT. OFFICERS (Contd)

- Resource optimisation
- Reduces duplication and redundancy in implementation of govt. programmes and schemes
- Guides decision making
- Reliable data integrity ensures that equity and impartiality is maintained whilst implementing programmes

# IMPORTANCE OF DATA IN COMPLIANCE MATTERS

- High Court cases and summons
- Regulatory Commissions –CIC, MFSC, MHRC, LOK AYUKTA
- State Legislative Matters- Questions, Motions,
- Assembly Committees
- Lok Sabha Committees
- Rajya Sabha Committees
- N.G.O. queries

**THANK YOU FOR YOUR KIND  
ATTENTION**