



SURVEY OF INDIA

**GEO-SPATIAL WORLD FORUM-2017 ,
Hyderabad**

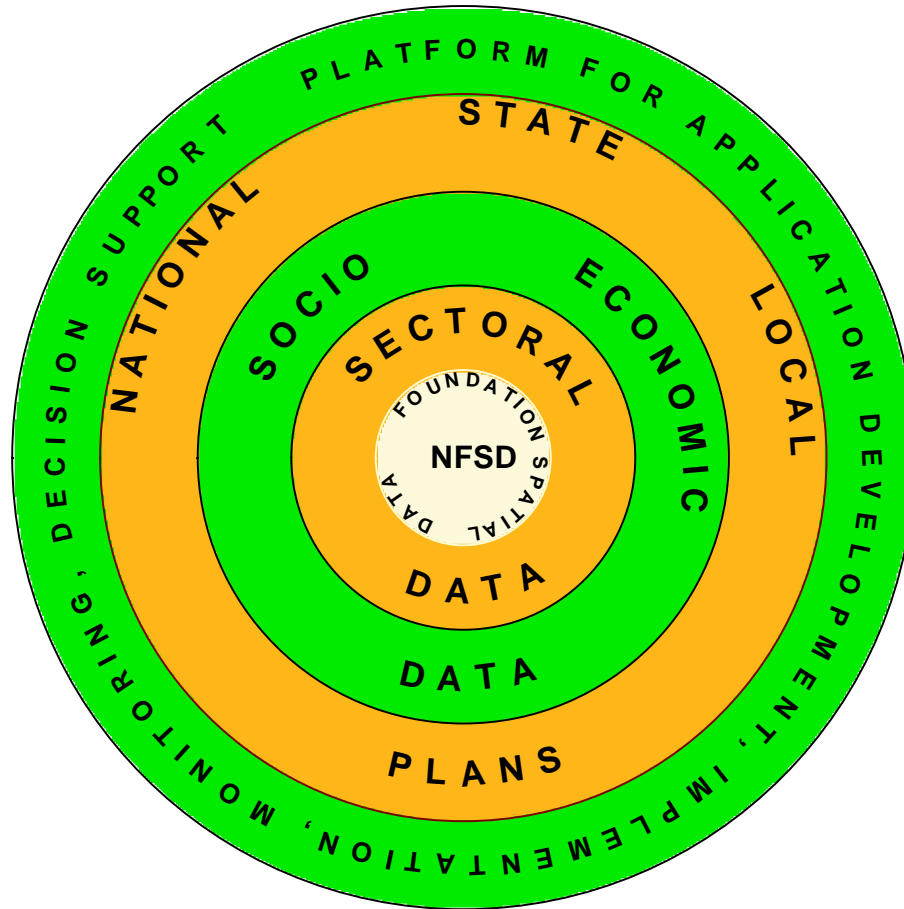
Power of Geospatial Data

- Great Integrating Power by cutting across all domains
- Adds a totally new dimension to conceptualization and analysis of real world problems

USER EXPECTATION

- Solve the problems of common man in efficient automated way
- Catalyze their Socio-Economic Development

Conceptual Representation of Integrated Datasets



Ideal Scenario

- Cross Relationshipship among various datasets in terms of XYZ co-ordinates
- The simplest approach – adoption of uniform accuracy standards for all the datasets – conforming to the National Framework and/or National Foundation Dataset (FDS)

CHALLENGES

- Heterogeneous legacy datasets in terms of spatial and temporal accuracies which are even statutory in some cases viz Boundaries, cadastral datasets
- No clear and uniform understanding of requirements/Data model structure of various stakeholders
- No Stewardship and Custodianship Model

CHALLENGES-2

- Integration of non-Spatial Datasets viz Taxation, Aadhar, Governement Schemes, Telephone, Crime Records, CRM , Census, Pollution data etc

WAY FORWARD

- National Data Framework and National Foundation Dataset (FDS) of adequate standards in place
- Redefine the content of National Foundation Dataset i.e. including Imagery and Geo-coded addressees as part of FDS in addition to Vector layers
- Define Standards and DMS for all stakeholders
- Stewardship and Custodianship Model in place
- Crowd Sourcing

MAINTAINING CONTINUITY

- Till the void of accurate FDS is filled, Existing/Legacy Datasets have to be used
- We can use it to firm up various approaches, processes and applications, we envisage for common people
- However we need to be cautious of the limitations of our analysis and conclusions that we derive from such heterogeneous datasets

NEED FOR STATISTICAL APPROACH TO GIS ANALYSIS/RESULTS

- Theory of Errors and Error propagation needs to be applied in GIS applications to convey the limitations of the results to the user
- Stochastic Model approach to be used for continuously refining the GIS model