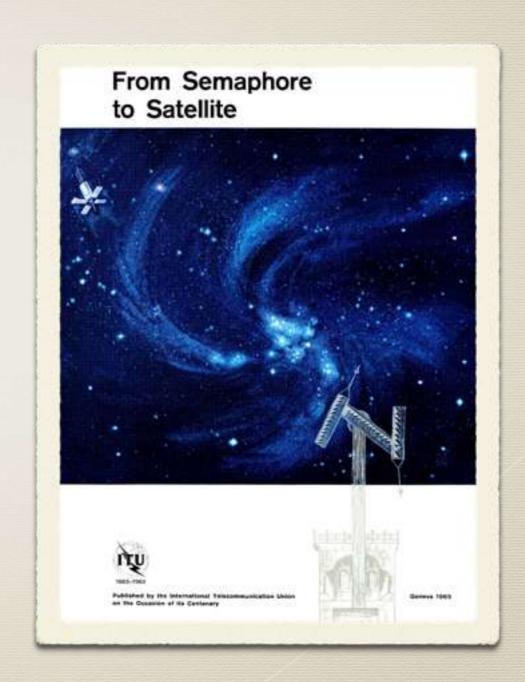
Satellites to Social Benefits

Arup Dasgupta
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<u>arup@geospatilmedia.net</u>

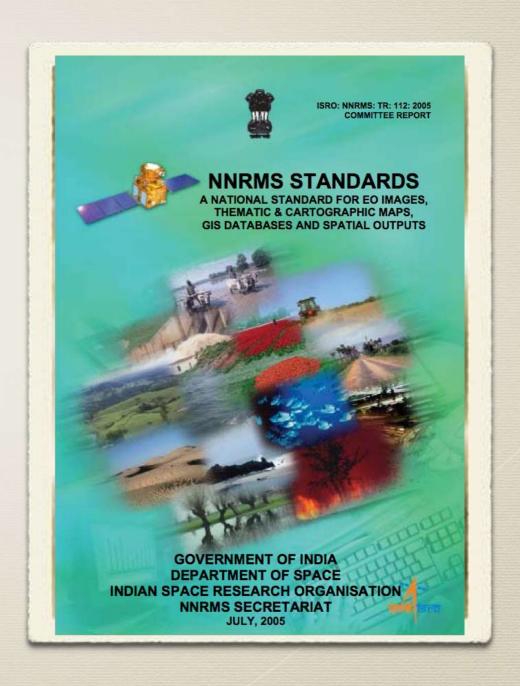
From Surface to Space

* We moved from surface to space for better global and regional communications...



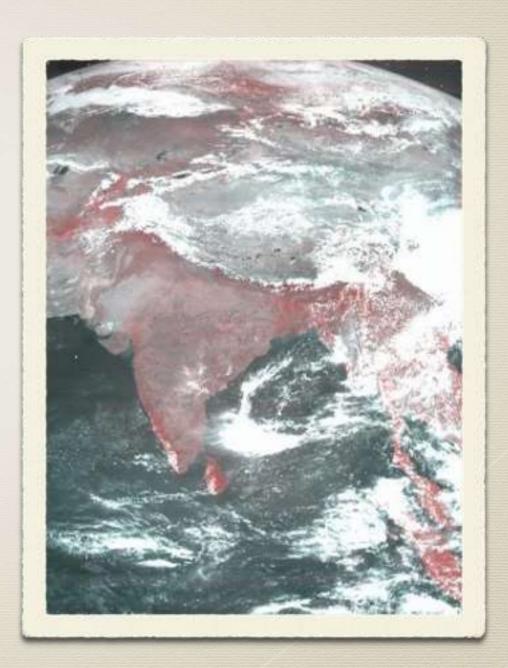
From Space to Surface

* ...and from Space we are looking down at the surface to manage our planet!



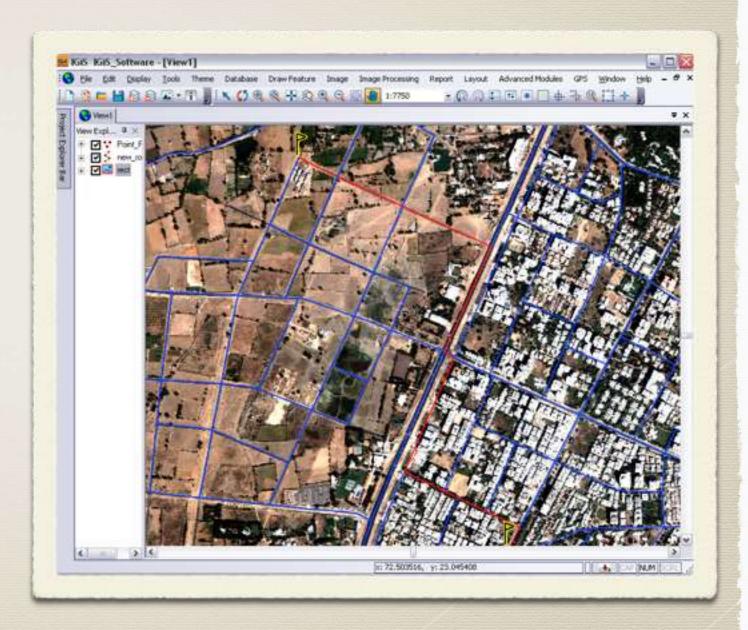
The View from Space

- Initially imagery from space
 was admired for its synoptic
 view the big picture
- Higher resolution imagery supplied more details at the cost of synopticity
- * Interpretation depends on Ground Truth
- Interpreted maps are not solutions



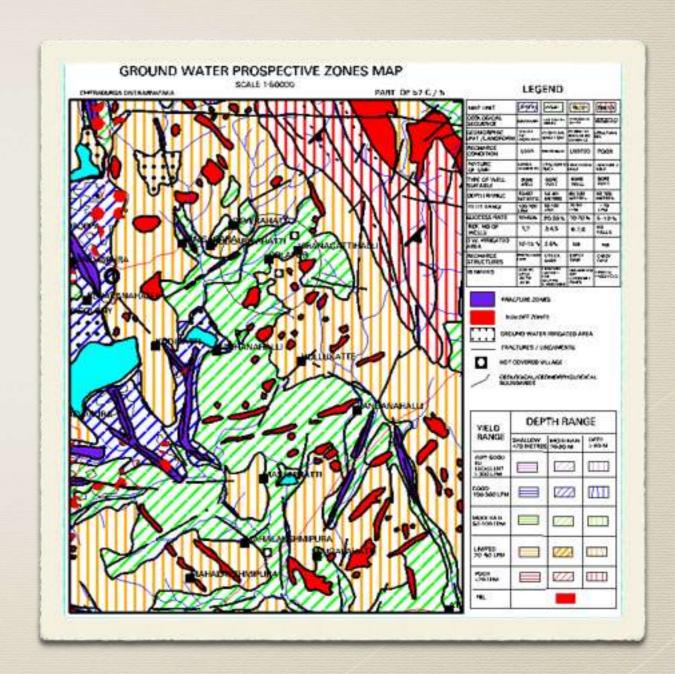
The View from Space

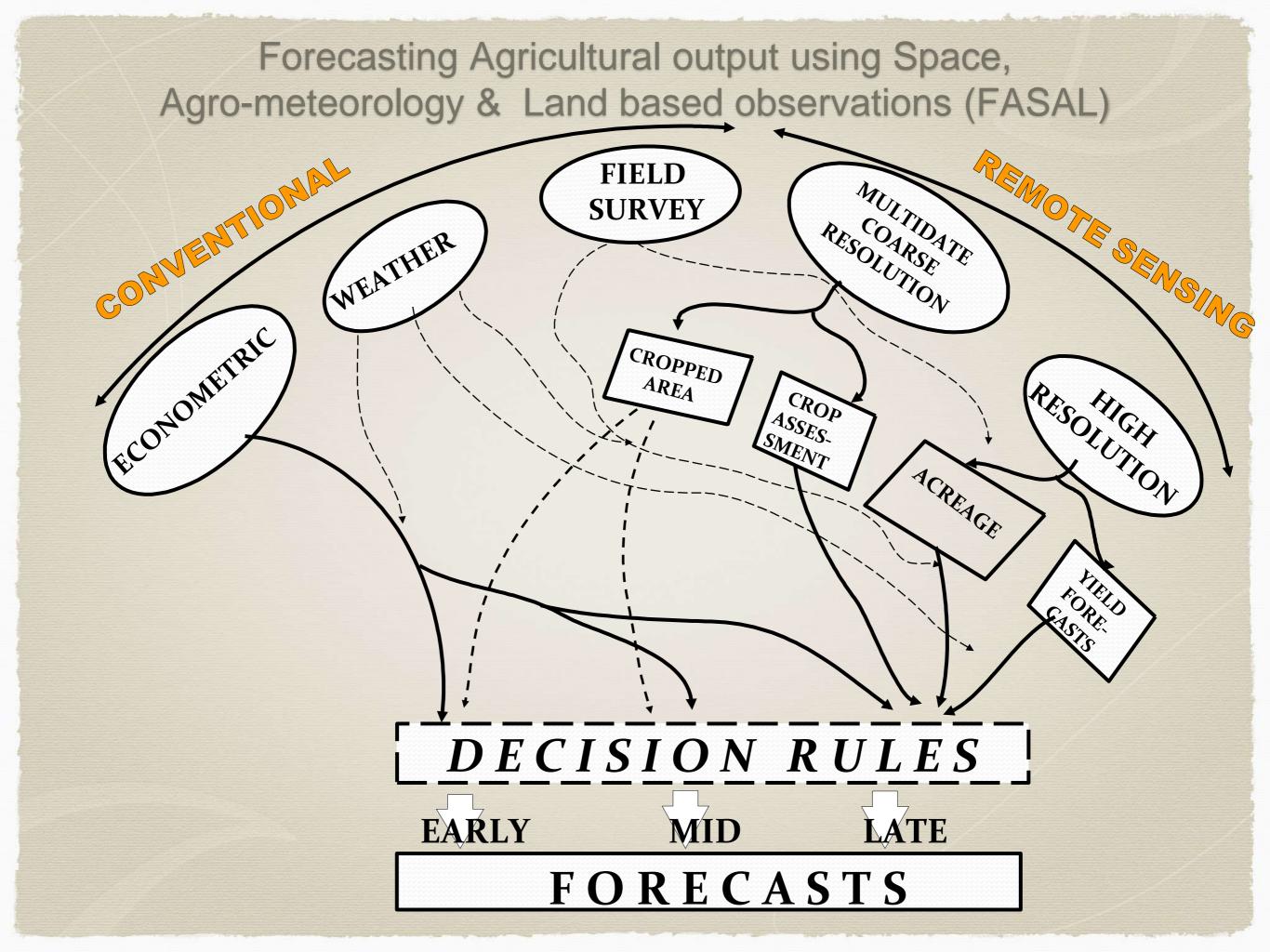
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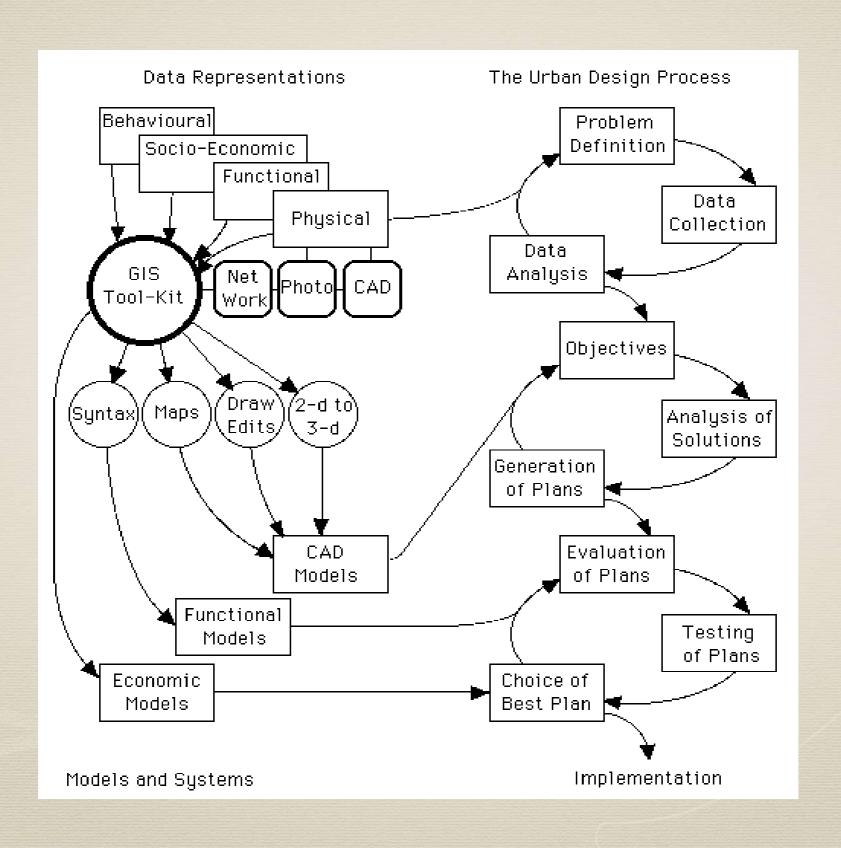
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Geospatial and Urban Design



Space to Surface Dichotomy

* Space View

- * Synoptic view
- Reduce costs by covering large areas
- Universal prescriptions for all
- Segmentation by community and individual not possible
- * Look at end beneficiary as a passive receptor
- * Surface View
 - * Local information available through Survey and VGI
 - * Participative decision making
 - Lack of awareness about Geospatial technologies

Blending Space and Surface



Ground Control Network

Primary/ Secondary / Tertiary Ground Control Network

Establish Monument

Observation With Triangulation method with DGPS

Conduct GramSabha

Collect Old Village Map

Updation of KGP/Durusti Patrak/Jamin Sampandan

Download Latest Records of Rights from NIC portal

Phase II Survey Activities

Import ROR Data

Inform Land holder for Survey

Detail Measurement of Land Parcel with topographical feature

Import GPS Data & Map Generation

Tippan Generation for Govt. Land where adjoining private land have encroached

Form-B Generation & Discrepancy Register

Generation of Notice (LPM) & Distribute to every Land Holder

Phase III Post Survey Activities

Receive Objection from land holder

Adjudication -Solve
Objection with Govt Surveyor

New Survey number assignment automatically

Form –C generation with New survey number

Final map Preparation with Tippan & Adjudication data

Report Generation

- 1) Encroachment Register
- 2) Main Register
- 3) Khetarwar Patrak
- 4) Kayam Khardo
- 5) Akarbandh with Tarij
- 5) Magna Patrak

Phase IV Promulgation

Final Map & reports submit to DILR & Dy Collector

New survey data upload on NIC Website

All reports Open at village level within 30 day notice

Acceptance of data by Authority

New 7/12 report generation with new information & map

Survey Activities: Overview



Carry out the field re-survey Referring to Form A data using DGPS/ETS



This activity follows the mirror principle.

 It refers to the fact that cadastral records mirror the ground reality.



Super imposition

on the land parcel

map





Serve a notice to the occupant along with **Land Parcel sketch**

Collect the information for the land parcel in a predetermined format



Registration of the polygon theme of particular village



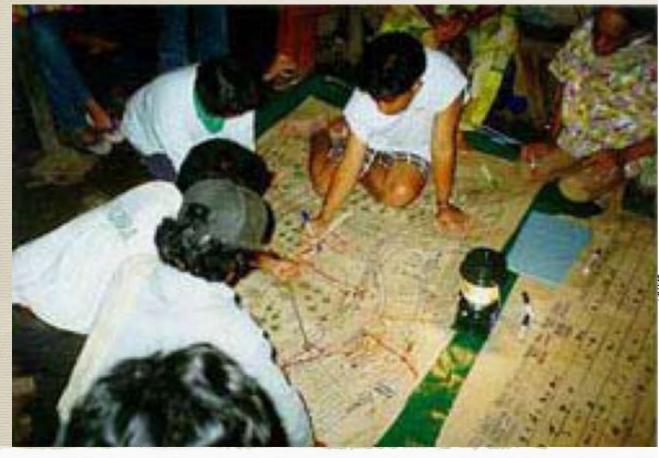
Generate Form B

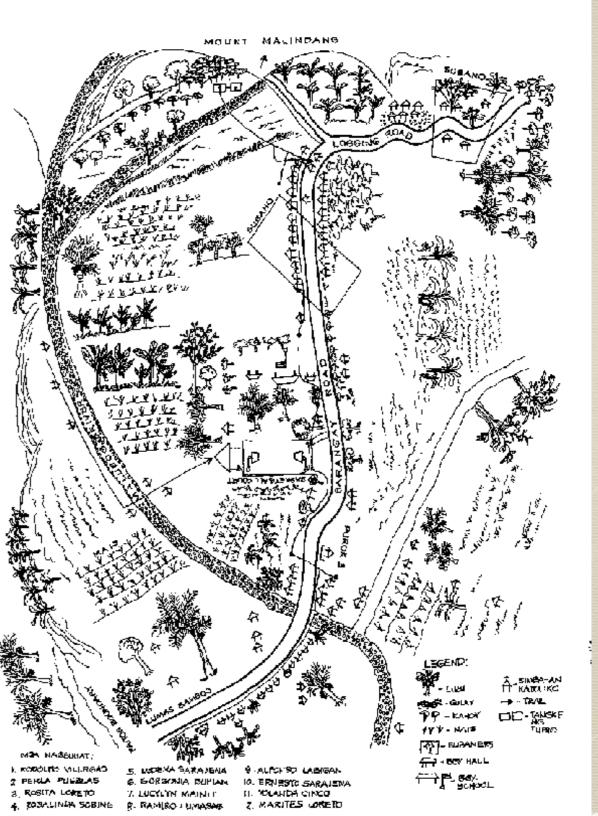


Generate the land parcel sketch in pre-determined scale with Tippan digitization

The NGO P-P Model

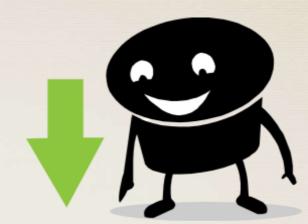
Resource Mapping is a method for collating and plotting information on the occurrence, distribution, access and use of resources within the economic and cultural domain of a specific community by the community





Geospatial Resources Collaboration

- Top-Down
 - Remote Sensing gives a synoptic view
 - GIS enables overlay of multiple datasets
 - Enables decision support for planners







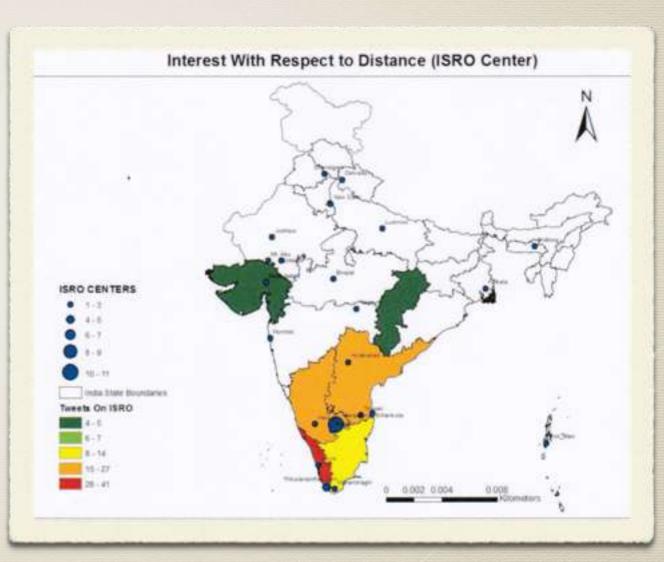
Challenge

Bottom-Up

- Community has the ground truth
- Plans are as per stakeholders' needs

Social Media as VGI

- Public interest in ISRO's
 Mission to Mars expressed as
 tweets
- * Influence of ISRO Centres on public perception



Thank You