

The First Mile Approach

GEOSPATIAL IN THE SERVICE OF RURAL COMMUNITIES

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The Foundation for Ecological Security (FES)

The Foundation for Ecological Security works towards conserving forest, land and water resources for improved ecological, social and economic outcomes at the local level.

We work on village commons and help 30 thousand villages reclaim 8.7 million acres of forests and pastures; both directly and indirectly with other NGO partners.

In doing so we are involved in repositioning the metaphorical Tragedy of Commons as the Promise of Commons.

Maps, Data and Information – Potential & Gaps

For people and communities to manage their resource systems at landscape level...

- Are there maps, data & information that actually reach the ground in an intelligible manner?
- Do these help lead to informed decision making and desirable actions?
- Do they speak to the inter-relationships and reciprocities between ecological, social and economic domains?
- Do they add to the voice and agency of local communities?

India Observatory Database

Socio-Economic

Spatial data:

Administrative Divisions (state, district, tehsil, village), 1991, 2001 & 2011

Digital chart of the world

- River basins, Bio-geographic regions
- ASTER, SRTM & Gtopo30 (Digital Elevation)
- Agro-eco regions
- Protected areas (IUCN 2012)
- Forest cover (1990-2011)
- Wasteland (1995, 2005 & 2010)
- CGWB Watershed Atlas

Non-spatial data:

- Census data 1991 & 2001 (around 300+ attributes)
- Time series data for Project States (1951-2007)
- Market potential Areas (2001 & 2008)
- Groundwater data (2004)
- Forest cover from 1990 – 2011

Ecological

Remote Sensing:

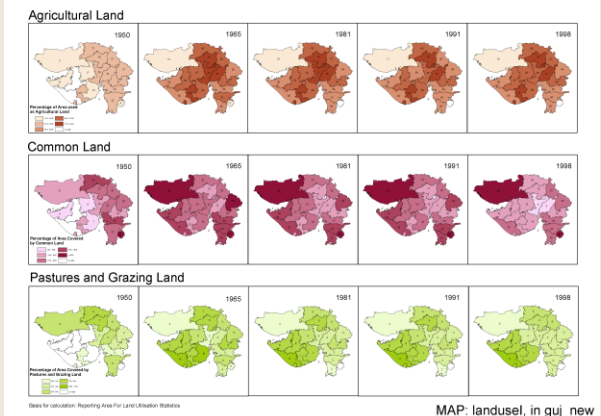
- Vegetation Indices NDVI/EVI From 2000 onwards
 - Leaf Area Index
 - Gross Primary Productivity
 - Thermal Anomalies & Fire
 - Land Cover Type Yearly
 - Vegetation Continuous Fields
 - GRACE TELLUS Landmass Dataset
 - Climatology Data (CRU TS 3.20, 1901 to 2011, Monthly Average of Temperature (Min, Max, Mean), PET, WET Days etc.

Other Datasets

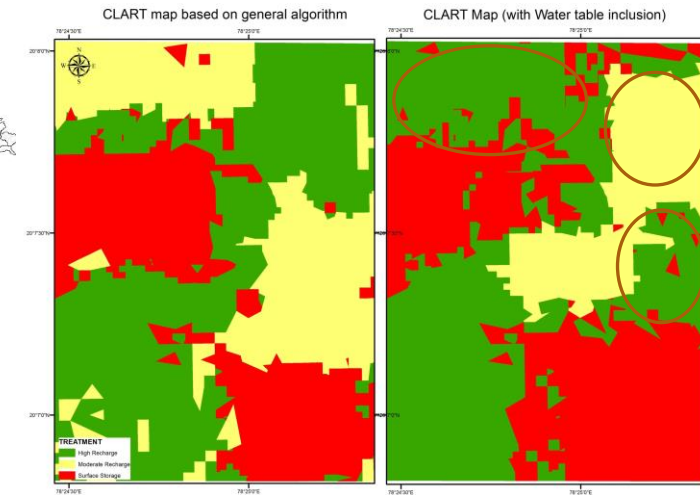
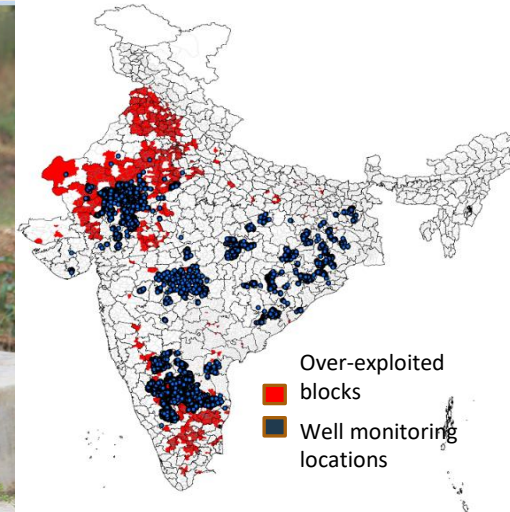
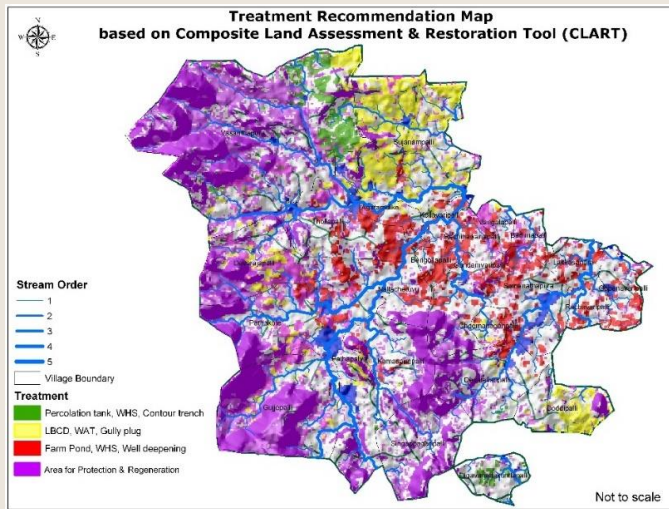
- Other Census like Agriculture, Livestock, Irrigation etc.
- Harmonized World Soil Database
- Global Aridity and PET Database
- Bio-geographic & Agro-ecological regions
- Expert Range Maps

Biodiversity

- Approximate 30,000 Taxa of Birds, Mammals, Reptiles, Amphibians, Spiders and Angiosperm Flora
- Diverse Database
 - Bibliography
 - Books
 - Images and Multimedia
 - Museum Collection
 - Sighting Database
- GIS Based distribution and sighting maps

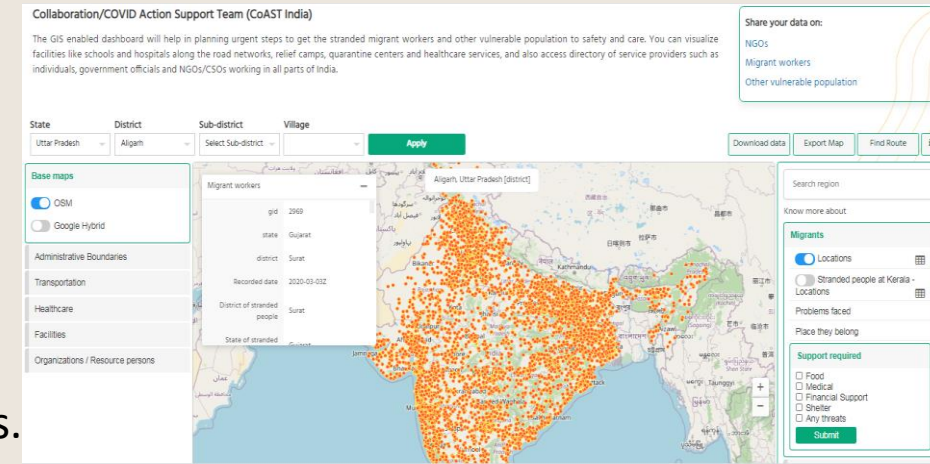


GIS Based Tools for Local Planning and Action



CLART (Composite Landscape Assessment & Restoration Tool) – Planning tool that aids in context based soil and water conservation restoration measures.

GWMT (Groundwater Monitoring Tool) – to share data and capture local groundwater levels, to complement CGWB data, for better local level analysis.



CoAST (Covid Action Support Team) – connecting help seekers and help providers.

Meeting Ground – Knowledge Commons

- Enhance reach of data sets and spatial analytics to the ground in an intelligible manner
- Position village communities/end users at the center of decision making
- Promote evidence based decision making
- Nurture an ecosystem platform that converges
 - Local and external knowledge
 - Initiatives of various NGOs, GOs, Academia and Funders
 - (into a) Grid of data servers
 - and gives expression to thought leadership

Thank You!

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