

BANKING



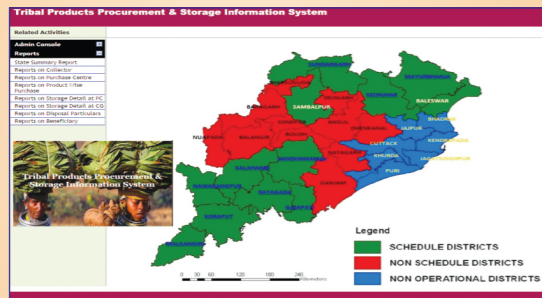
IRRIGATION



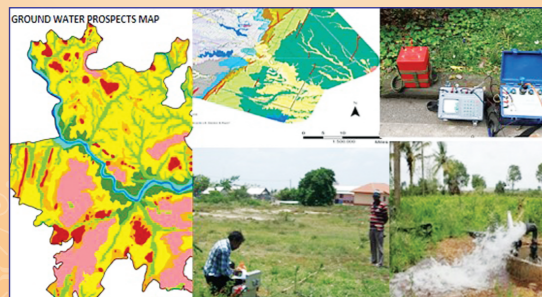
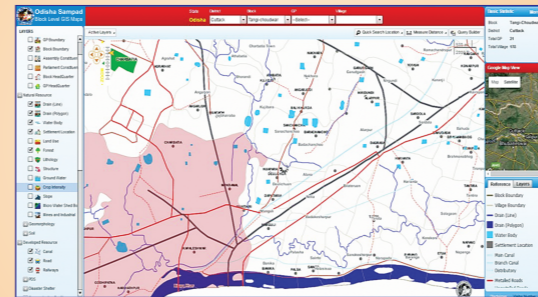
URBAN



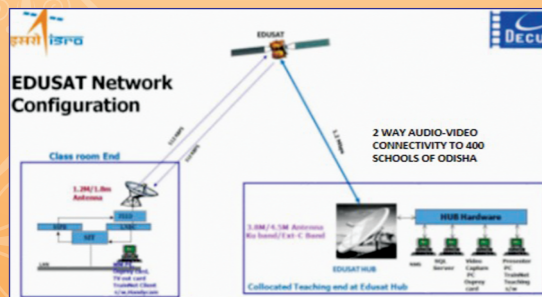
DATA SERVICE



TRIBAL DEVELOPMENT



GROUND WATER



EDUCATION

UPCOMING PROJECTS

- Cadastral level Geo-spatial Information Dissemination
- Geo-coordinate Library of Landmarks/important Locations of the State
- Updated Odisha Sampad on Internet
- Odisha Spatial Datasets availability through 'BHUBAN'
- Utilisation of 'RISAT' all Weather Data & ISRO 'GAGAN' Network
- Urban Cadastral GIS database for GA Dept., Odisha
- Extension of Edusat Network
- Establishment of Odisha State Database Infrastructure (OSDI)
- Industrial infrastructure data supply services through GOiPLUS and Web services for Land Bank data dissemination
- Canal Network (Minor Irrigation) Database Development
- Geo-spatial data for Agriculture Development
- UAV applications for Disaster Management
- ALTS applications in Coastal Area Management
- GPS based Vehicle Monitoring System

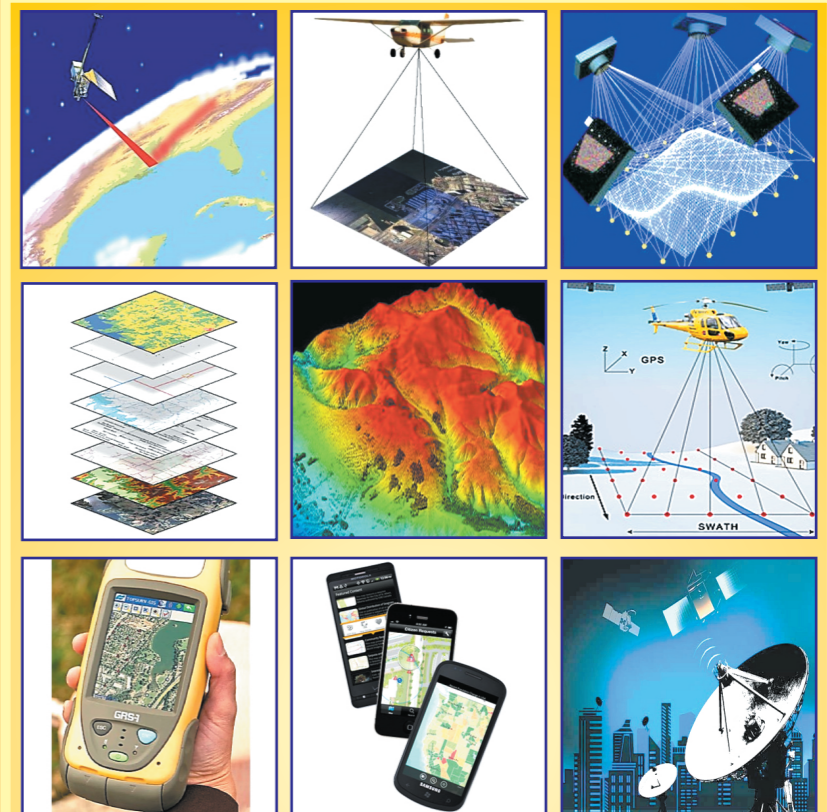
Contact Details :-

**ODISHA SPACE APPLICATIONS CENTRE (ORSAC)**

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**ORSAC**  
[www.orsac.gov.in](http://www.orsac.gov.in)



Nodal agency for providing Remote Sensing, GIS, GPS and SATCOM applications solutions to all the departments / offices and agencies of the state

State centre of ISRO/Dept. of Space, Govt. of India for implementing the ISRO/DoS/NRSC/SAC/DECU/RRSC projects



**ODISHA SPACE APPLICATIONS CENTRE**

## MANDATE

- State agency for repository of satellite data, Aerial photo, Radar image, topo maps, thematic maps and Geo-coordinates.
- Operationalisation of Space Technology Applications in State for development planning activities.
- Implementing agency for "Odisha State Data Policy" and maintenance of Odisha Spatial Data Infrastructure.
- Demonstration of multi-disciplinary application projects for natural resources management and environment monitoring.
- Operationalisation of district / block / village level GIS database through internet/Web-services.
- Participation in Remote Sensing and SATCOM programmes of Indian Space Research Organization (ISRO)/NRSC/ SAC/DECU and in data infrastructure programme of NSDI.
- Reaching quality teaching to school students uniformly across the state through EDUSAT network.
- Popularisation of Space Technology through Space Information Centre and Vigyan Prasar program.

## HUMAN RESOURCES

24 scientists, 46 Engineering / Technical staff and 34 supporting staff having specialisation in optical and microwave Remote Sensing, Image Processing, GIS, ICT, Digital Photogrammetry, GPS & Computer Applications etc. having subject background of applied geography, geology, physics, botany, oceanography, marine science, mathematics and civil / mining / electrical engineering etc.



## MAJOR ONGOING PROJECTS

- **National Level & Central-State joint Programme**
- Space based Information Support for Decentralized Planning, Odisha,
- Natural Resources Census (NRC) Landuse Project.
- FASAL (Forecasting Agricultural output using Space, Agrometeorology and Land based observations)
- Dissemination of Educational Services through EDUSAT and Interactive training through GRAMSAT
- Implementation of OSDI-Odisha Spatial Data Infrastructure
- **State Level Projects**
- Ortho-Image Generation of Odisha and Maharashtra
- NLRMP-(National Land Records Modernisation Programme) - Cadastral Resurvey & Updation
- Plantation monitoring of Odisha state and site identification for compensatory afforestation
- Geo-spatial technology for rural & urban development programme on web-GIS platform
- Study on interoperability of different GIS & Digital Image Processing (DIP) softwares
- RS & GIS inputs for Comprehensive Development Plan (CDP) preparation of towns
- Odisha Land Bank and GOiPLUS web-portal development-Govt. of Odisha's Industrial Portal for Land Use Services
- Web GIS 'Odisha Sampad'
- DGPS survey for Forest Diversion approval and Mining lease boundary
- Power-GIS for OPTCL
- Stage Carriage Permit Management System
- GPS based Vehicle Monitoring System
- Banking network web-GIS Database
- Tribal Products Procurement and Storage Information System

## INFRASTRUCTURE

**Digital Satellite/Aerial data:-** IRS2, Cartosat2, Resourcesat, AWiFS; World View 1 & 2, Orthoimages of entire state for the year 2010, 2012 and 2014. Aerial photographs of 10 coastal districts (1975/1988/1990) and five inland districts (2014-16).

**System, Server & Storage:-** Blade/ Rack/ Tower server and 150+ Highend Desktops. On-line storage- 36 TB, Mini storage of 9 TB.

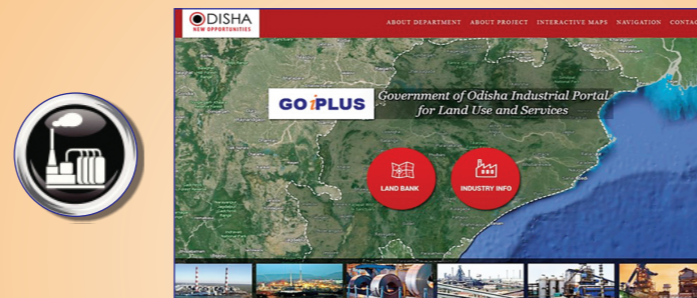
**Peripherals:-** Laserjet printers, A0 size Vidar Colour Scanner, Multifunction printer, A0 Designjet plotters.

**GPS/DGPS:-** Trimble/ Leica DGPS with Rovers, Handheld GPS and ETS.

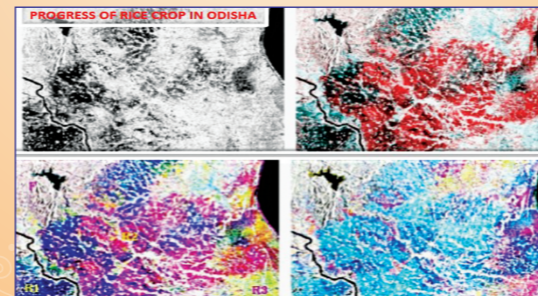
**Software-GIS:-** Arc-GIS/ Geomedia/ TerraGo Geo PDF/ AutoCAD. Arc-GIS server. Image processing- ERDAS, ENVI, TNT MIPS, Integraph Geospatial server, DBMS- ORACLE, MS SQL 2008, CITRIX, VMware Virtualisation, Exchange server etc.

**Communication:-** Direct Reception Syatems (1528), VSAT(353), Satellite Interactive Terminals for Edusat (219) & Gramsat (33), Earth Station and Studio for Edusat/Gramsat, RF link and Satellite connectivity.

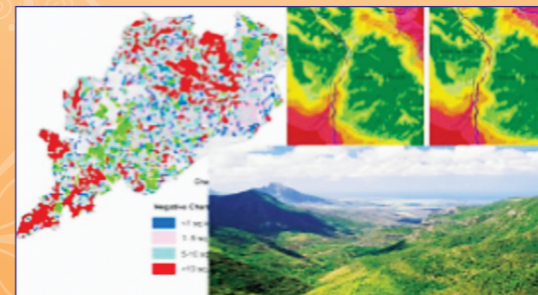
## ORSAC INPUTS FOR STATE DEVELOPMENT PLANNING INITIATIVES



INDUSTRY



AGRICULTURE

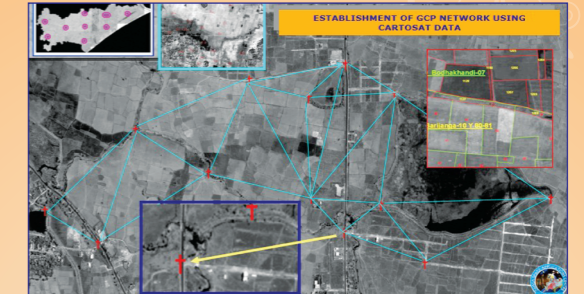


FOREST

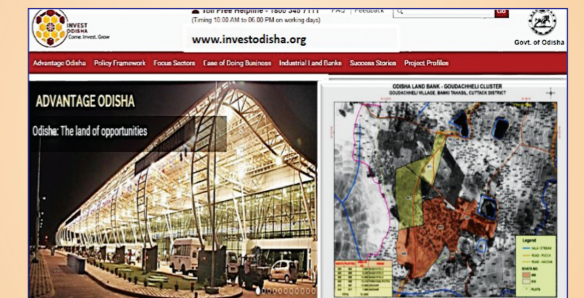
## ORSAC INPUTS FOR STATE DEVELOPMENT PLANNING INITIATIVES



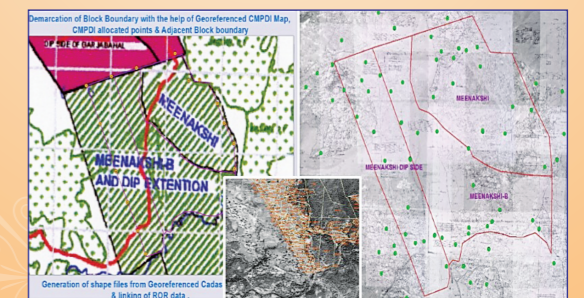
TRANSPORT



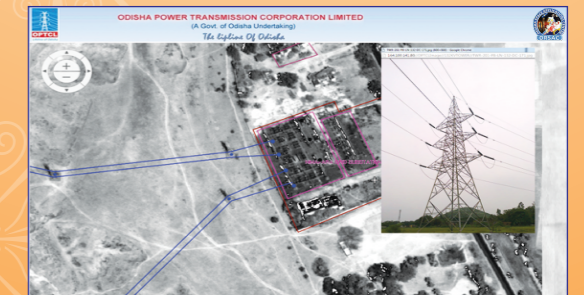
REVENUE



LAND BANK



MINING



POWER/TELECOM