



Department of Electronics and Information Technology
Ministry of Communications and Information Technology
Government of India



Digital India – GIS based Governance



Department of Electronics and Information Technology
Government of India

GIS : Application Areas

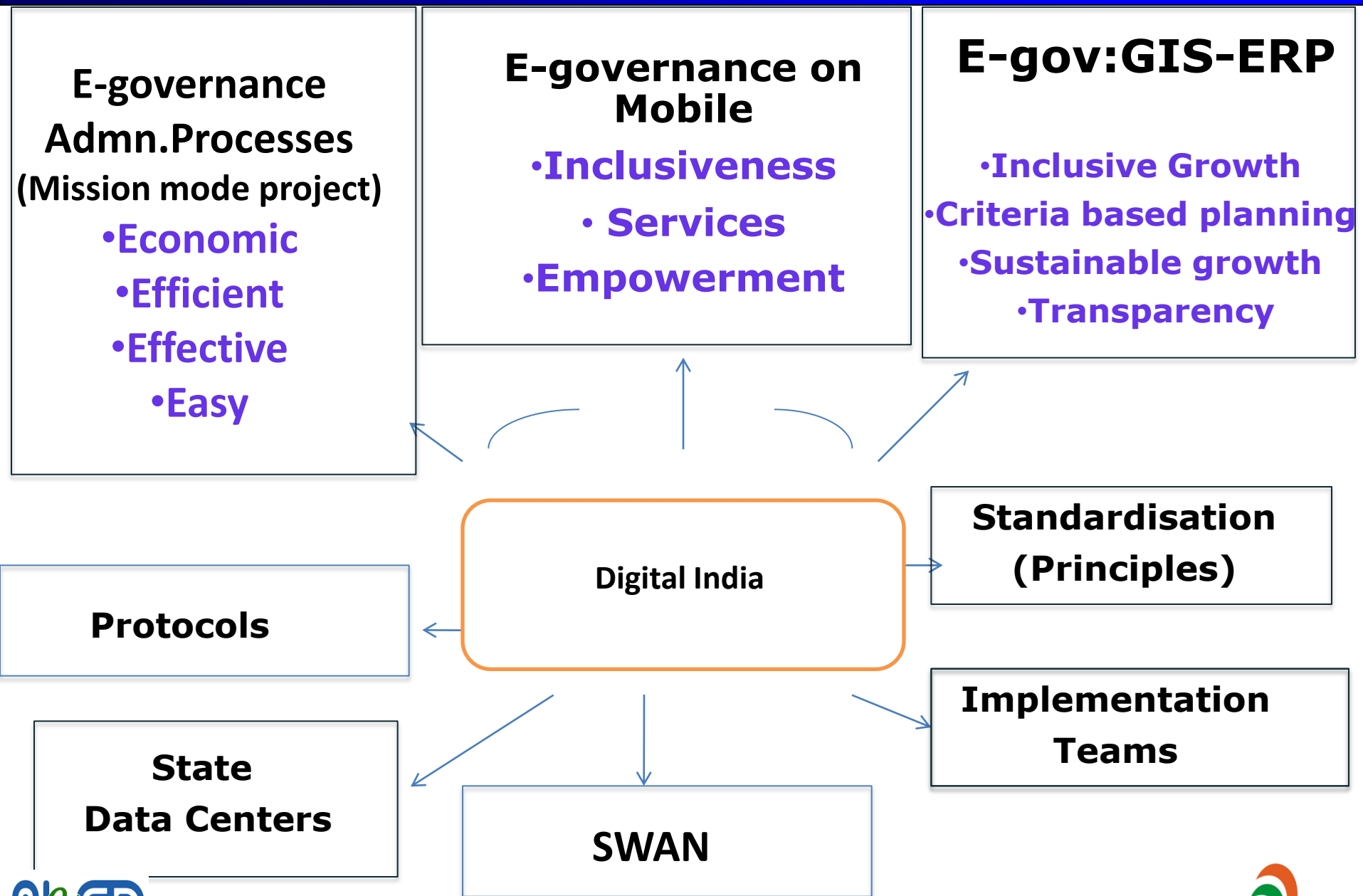
Objectives : To support :

- **Good Governance –**
 - Administrative functions
 - Monitoring of Programmes
 - Gap identification
 - Allocation of resources
 - Management of resources
- **Developmental Planning –**
 - Problem specific/Integrated
 - Programme convergence
- **Approvals/Permissions**
- **Spatial Decision Support Systems**
- **Disaster Management**
- **Services (G,B,C)**

Digital India: GIS based Governance

1. Governance & Services on Demand
2. Efficient planning & decision making under e-Kranti
3. Reforming Government through Technology
4. Information for All

GIS Applications : Institutionalisation



Acceptability :

- Problem definition & ownership by collaborators
- Authentication/Validation
- Data sharing across sectors

Adoptability :

- Maximum customization as per existing system
- Integration of GIS, Remote sensing, Image Processing, Photogrammetry, GPS, Mobile, MIS, Web etc

Affordability :

- Multipurpose common, compatible Geo-spatial database
- In house developed/open source software

Availability:

- Any time, any where in the country as per desired formats

GIS ERP: Geo-Spatial Database Characteristics

- Multi–Sector (Purpose)
- 2D/3D/4D
- Standardized
- Authenticated
- Compatible
- Common
- Seamless availability in any format
- Resource Ownership Level (Individual /Group /Community, etc.)

Base : Seamless Satellite Image

GIS ERP Application : Geo-Spatial Database Items

- Assets
- Physical Infrastructure
- Natural Resources
- Socio-economic aspects
- Demography
- Disaster Proneness
- Hierarchy (Sectoral)
- Man made resources
- Legal aspects
- Admin. Infrastructure
- Environmental Aspects
- Schemes/Plans
- Projects(Private)
- Settlements/Hamlets

Data, Information & Sub-classification of each item is available with respective concerned agencies and proposed to be used without any modification

Data Source : Central and State Govt. Agencies

GIS ERP Application : Database Creation

Village Map Geo-referencing through Indian Satellite Images

Collection of
Village Map



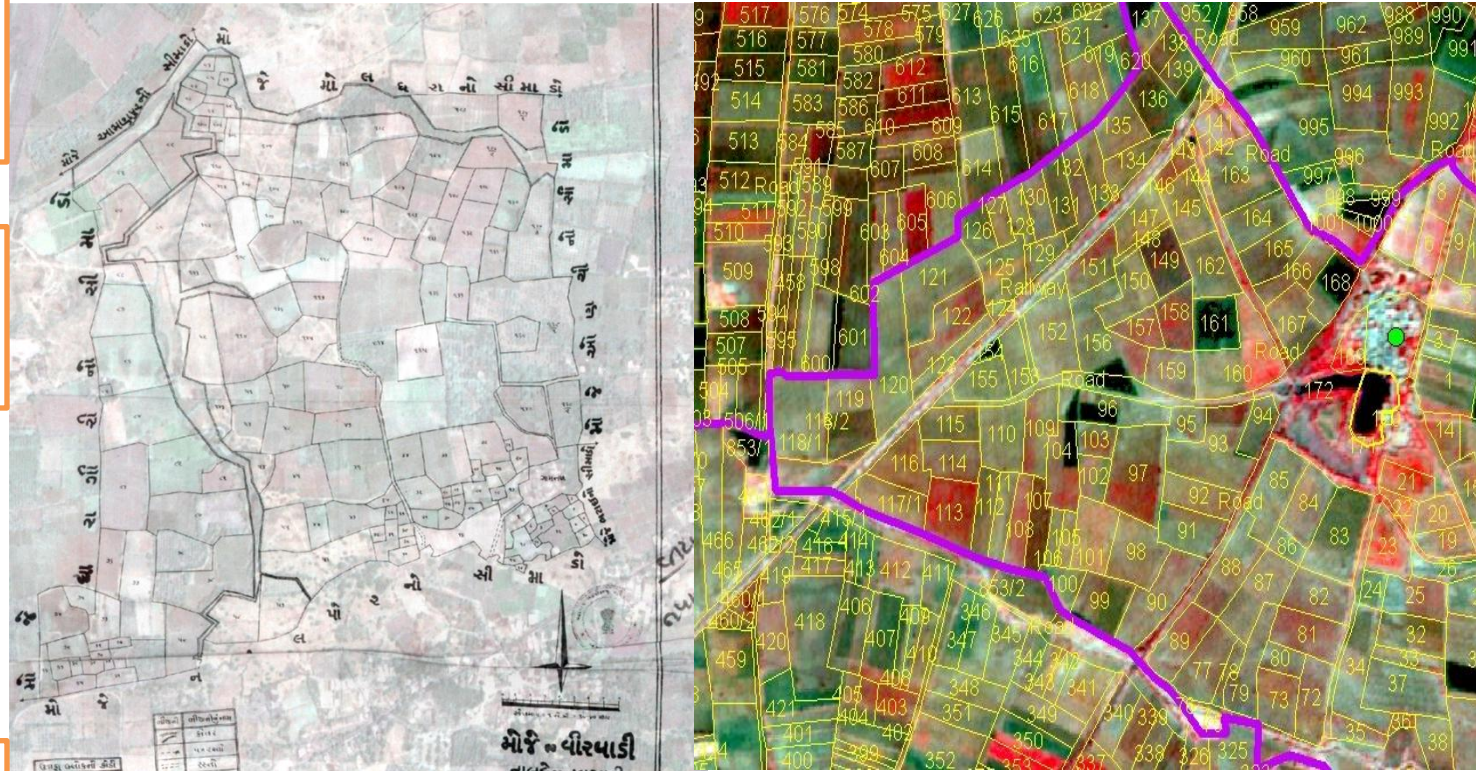
Scanning of Map



Geo-referencing
of Scanned Map
to Satellite data



Digitization of
Geo-referenced
village Map



Starting Point

- A Seamless base map for the state,
- Scale independent (Object oriented approach)

GIS ERP Application : Database Creation

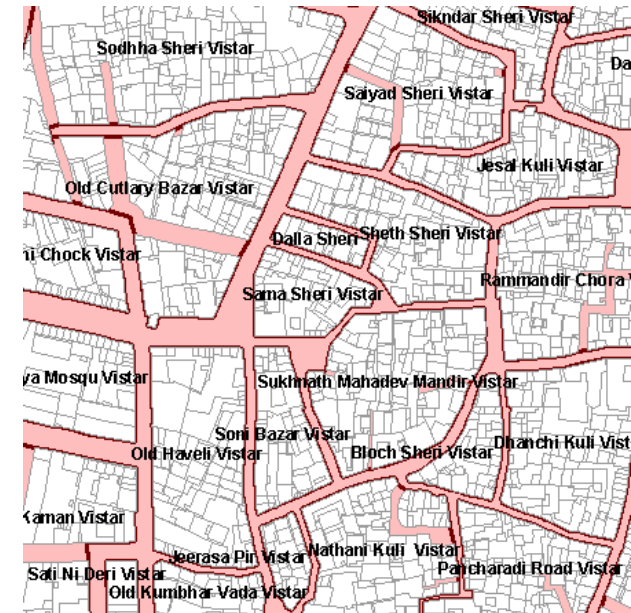
Harmonization and Geo-referencing through Seamless Ortho rectified High Resolution Satellite Images of :



Cadastral map



Town Planning map

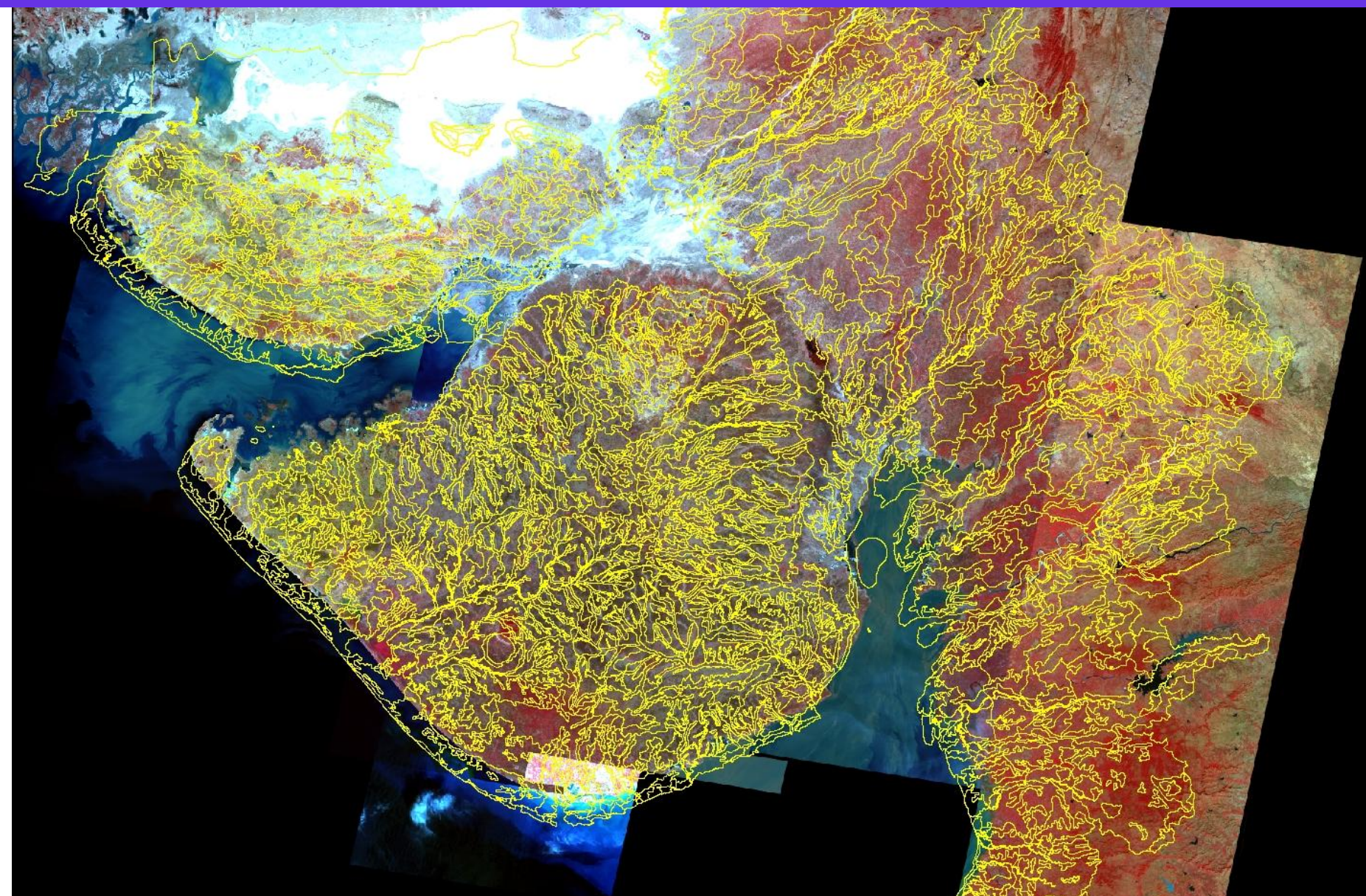


City Survey map

Other thematic layers may be created through:

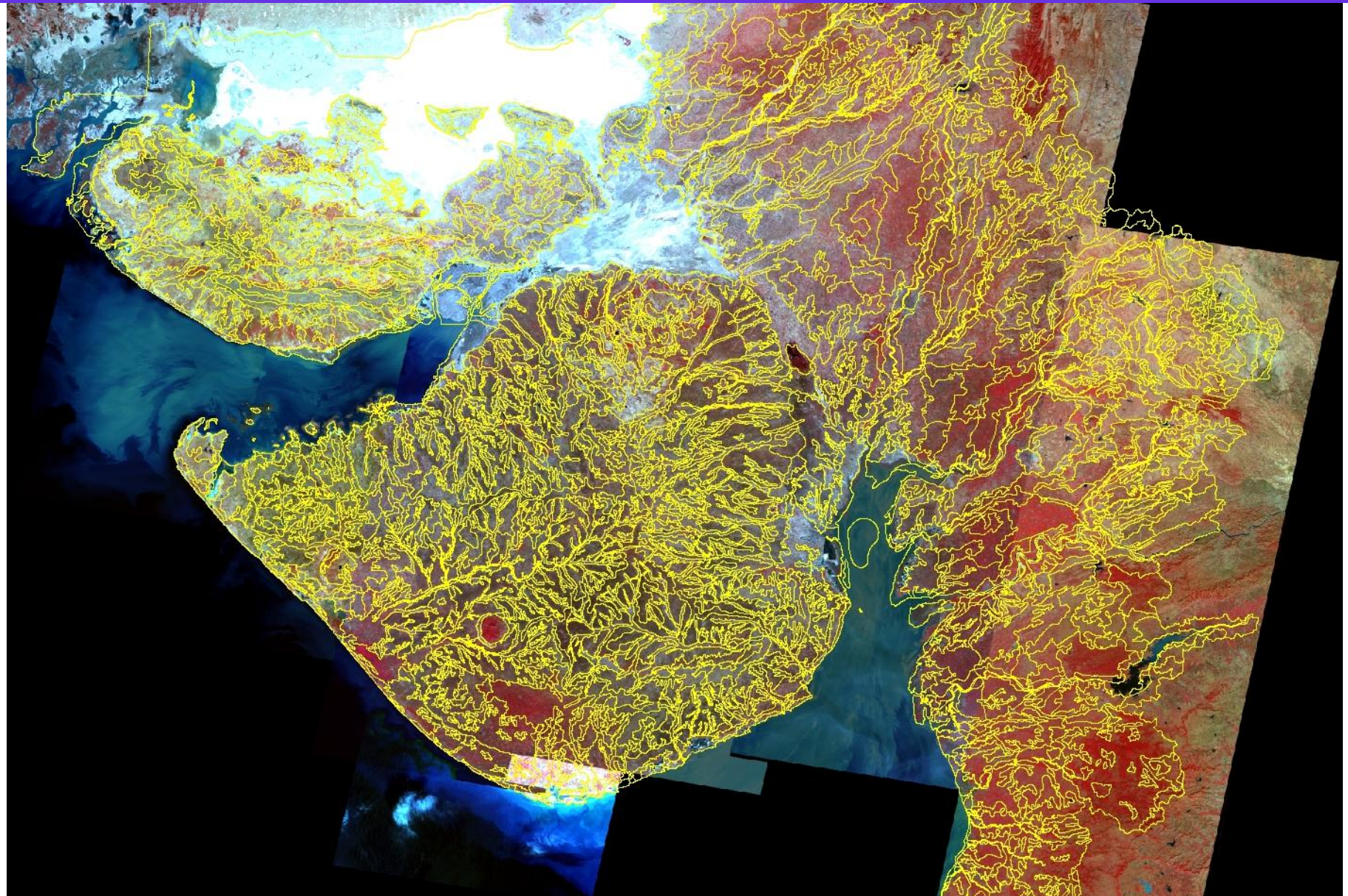
- i. Attributes
- ii. Superimposition of conventional maps
- iii. Application of criteria/conditions etc. and
- iv. Using locational information

Efforts towards soil health card preparation : through support of Geo-informatics technology



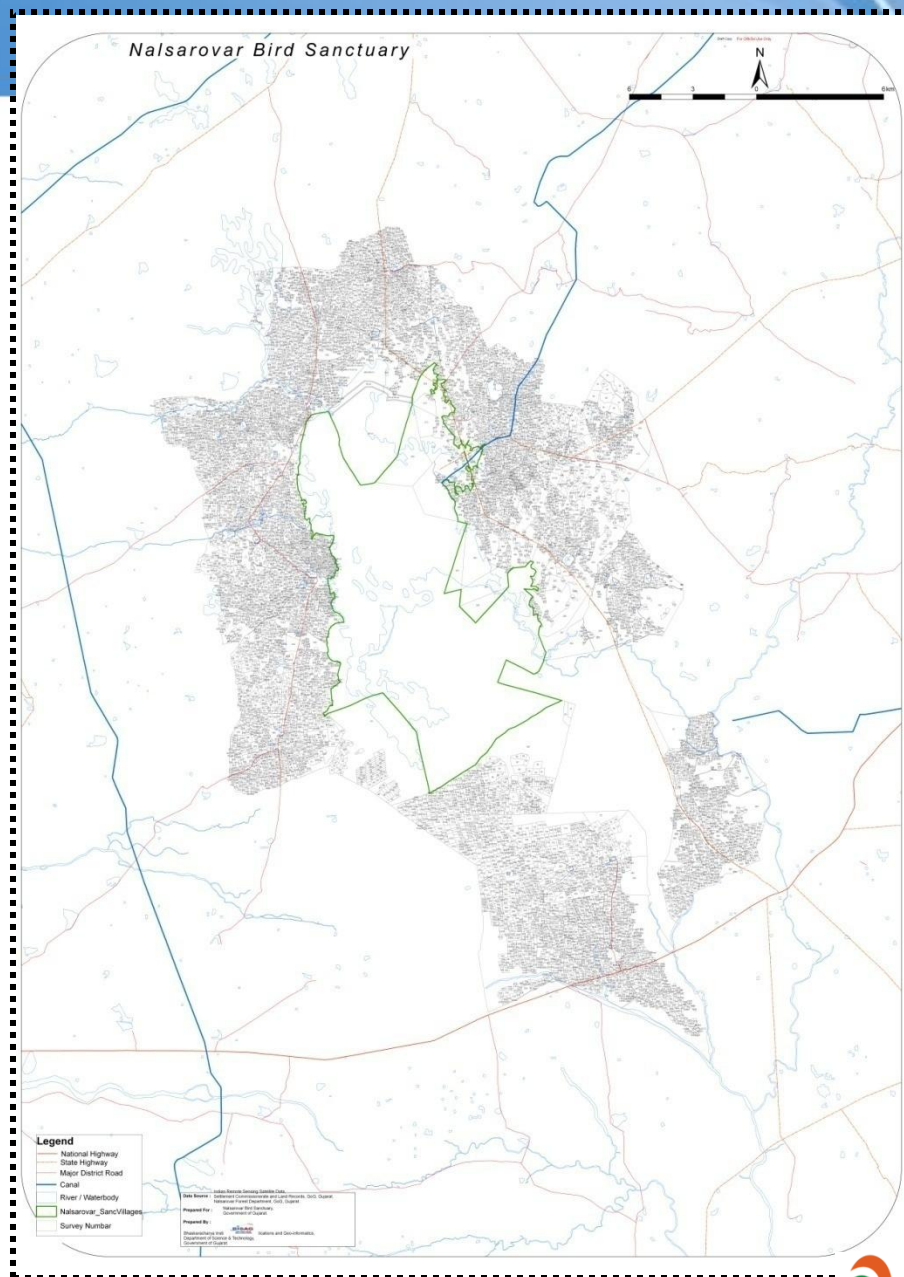
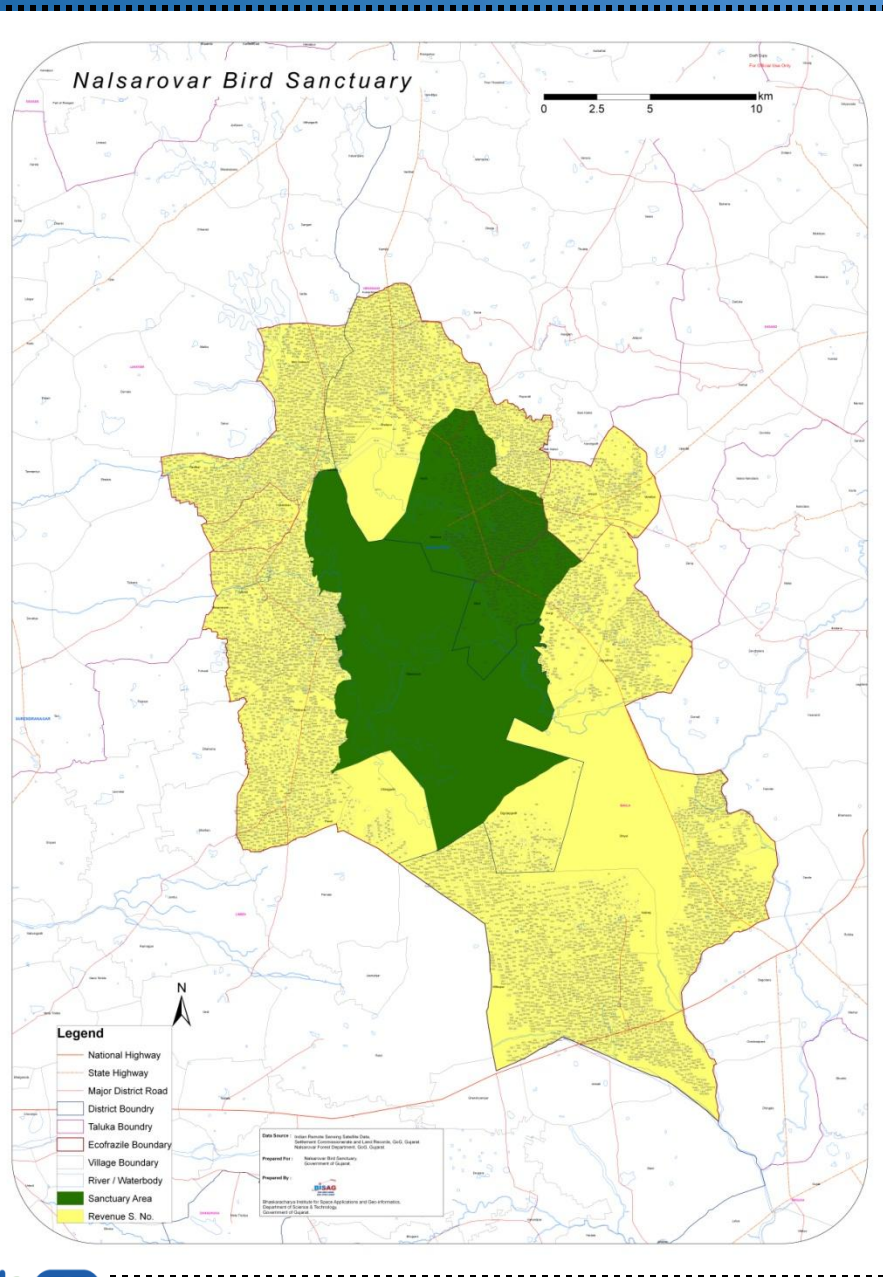
Superimposition of soil layer (From NBSS&LUP) on Geo-referenced satellite image of Gujarat

Efforts towards soil health card preparation : through support of Geo-informatics technology



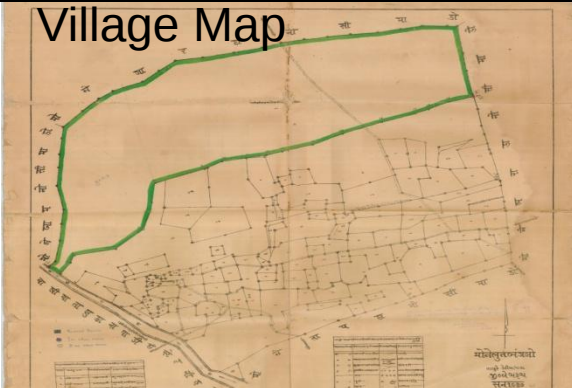
Spatial Corrections of Soil layer on Geo-referenced satellite image of Gujarat

Nalsarovar Bird Sanctuary

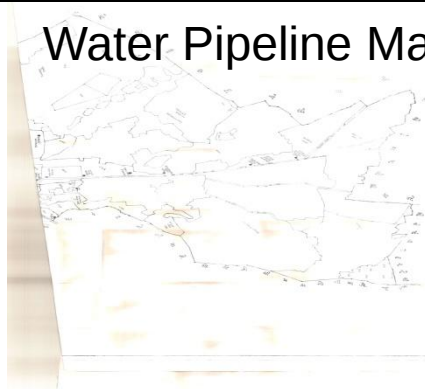


GIS ERP Application : Conceptualization, Creation & Applications

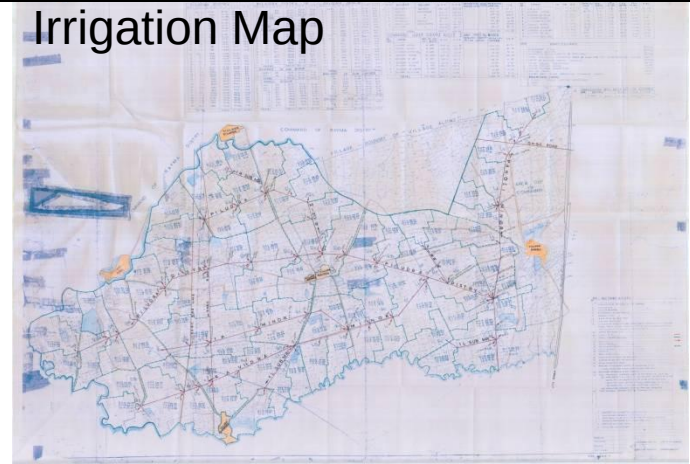
Village Map



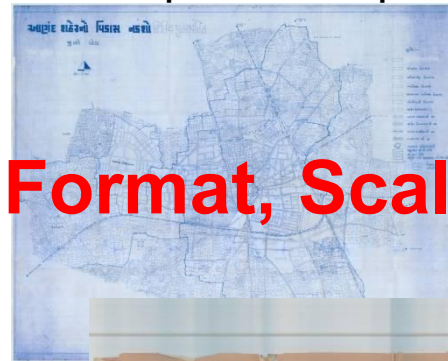
Water Pipeline Map



Irrigation Map



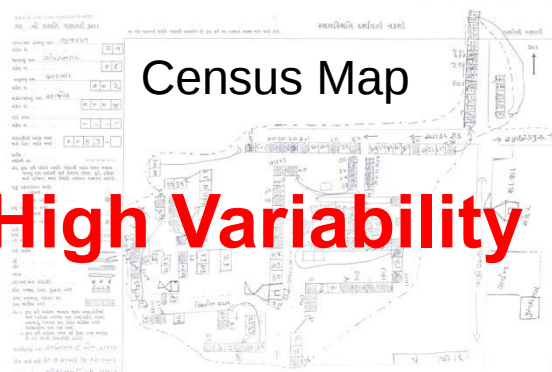
Development Map



Forest Map

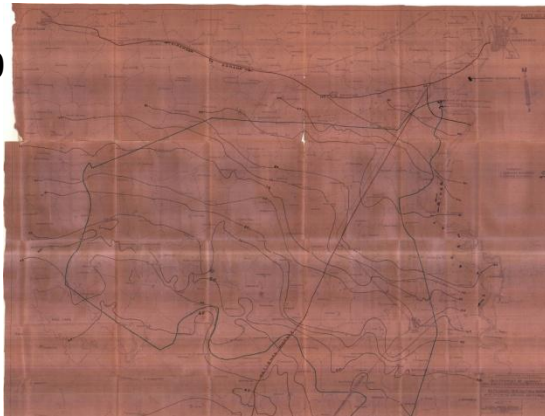


Census Map

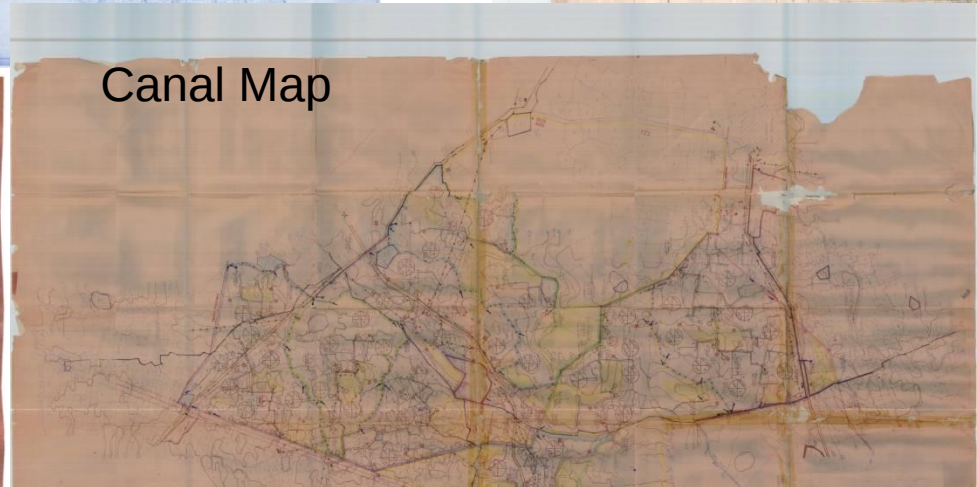


High Variability in Format, Scale, Contents, age etc..

Soil Map



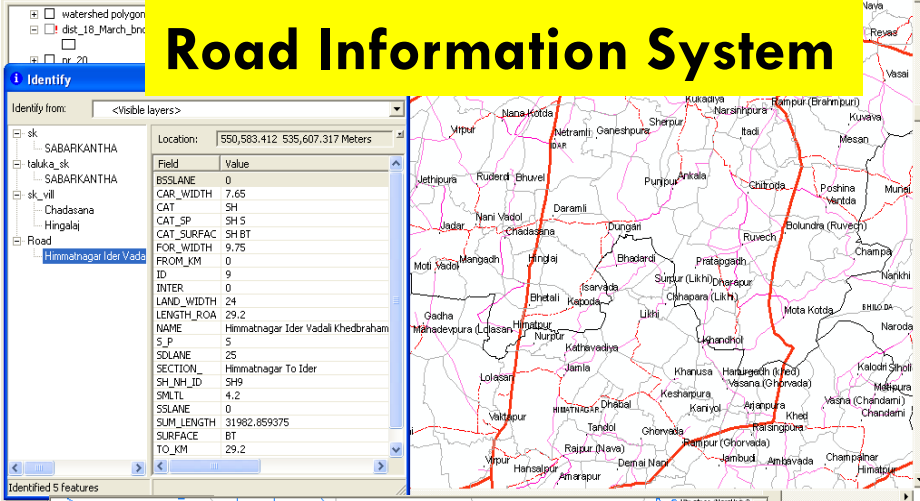
Canal Map



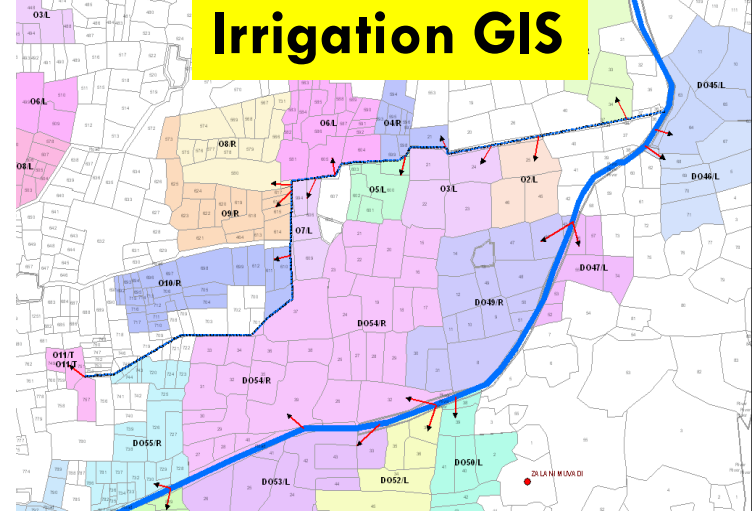
All the maps are superimposed on Geo-referenced Satellite Data

GIS ERP Application: Conceptualization, Creation & Applications

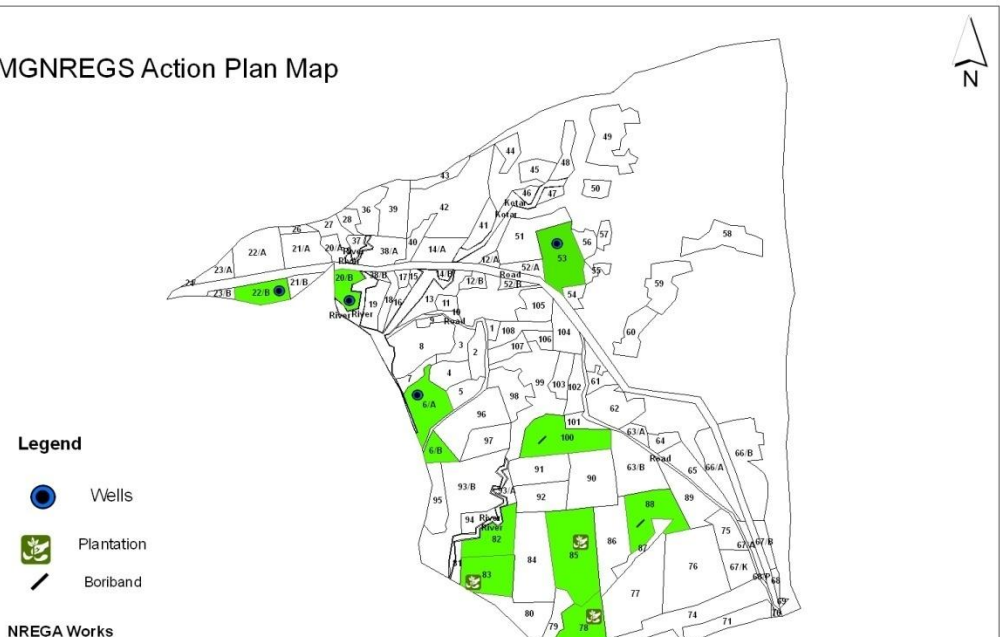
Road Information System



Irrigation GIS



MGNREGS Action Plan Map



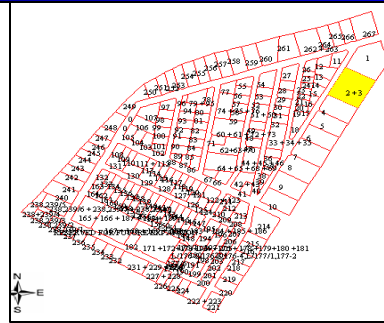
Check dam Information System

MGNREGA Information System

GIS ERP Application : Example of Geo-informatics Databases



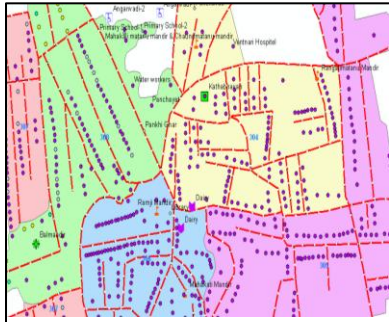
Village Map



GIDC



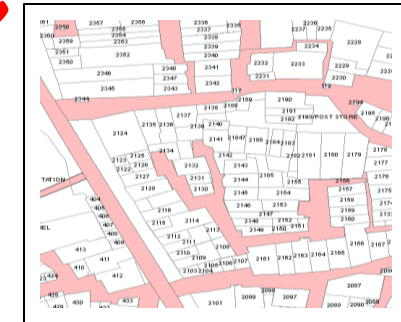
Check dam



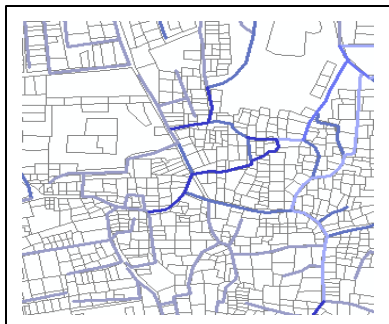
House Location



Canal



City Survey Map



Water Supply

School Name	Electrification	Sanitation	Compound Wall	Play Ground	Drinking Water	Standards at School
Dabhoda boy	Yes	Yes	Yes	Yes	Yes	1-7
Dabhoda Girl	Yes	Yes	No	No	Yes	1-7
Salujina Muvada	Yes	Yes	Yes	Yes	Yes	1-7
Orajina Chhapara	Yes	Yes	Yes	Yes	Yes	1-7
Butakiya	Yes	Yes	Yes	Yes	Yes	1-7
Ramnagar	Yes	Yes	No	Yes	No	1-7
Dadunagar	Yes	Yes	Yes	Yes	Yes	1-7

School



CRZ Demarcation

GIDC

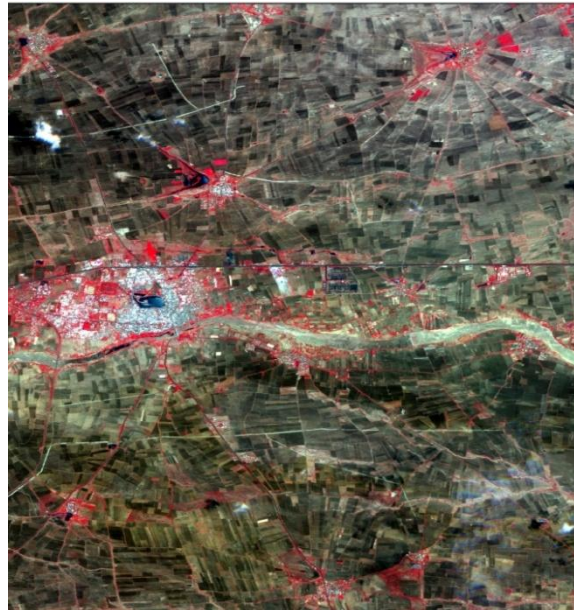
Canal

School Name	Electrification	Sanitation	Compound Wall	Play Ground	Drinking Water	Standard at School
Dabhoda boy	Yes	Yes	Yes	Yes	Yes	1-7
Dabhoda Girl	Yes	Yes	No	No	Yes	1-7

City

Through Seamless Satellite Image as a Base Map

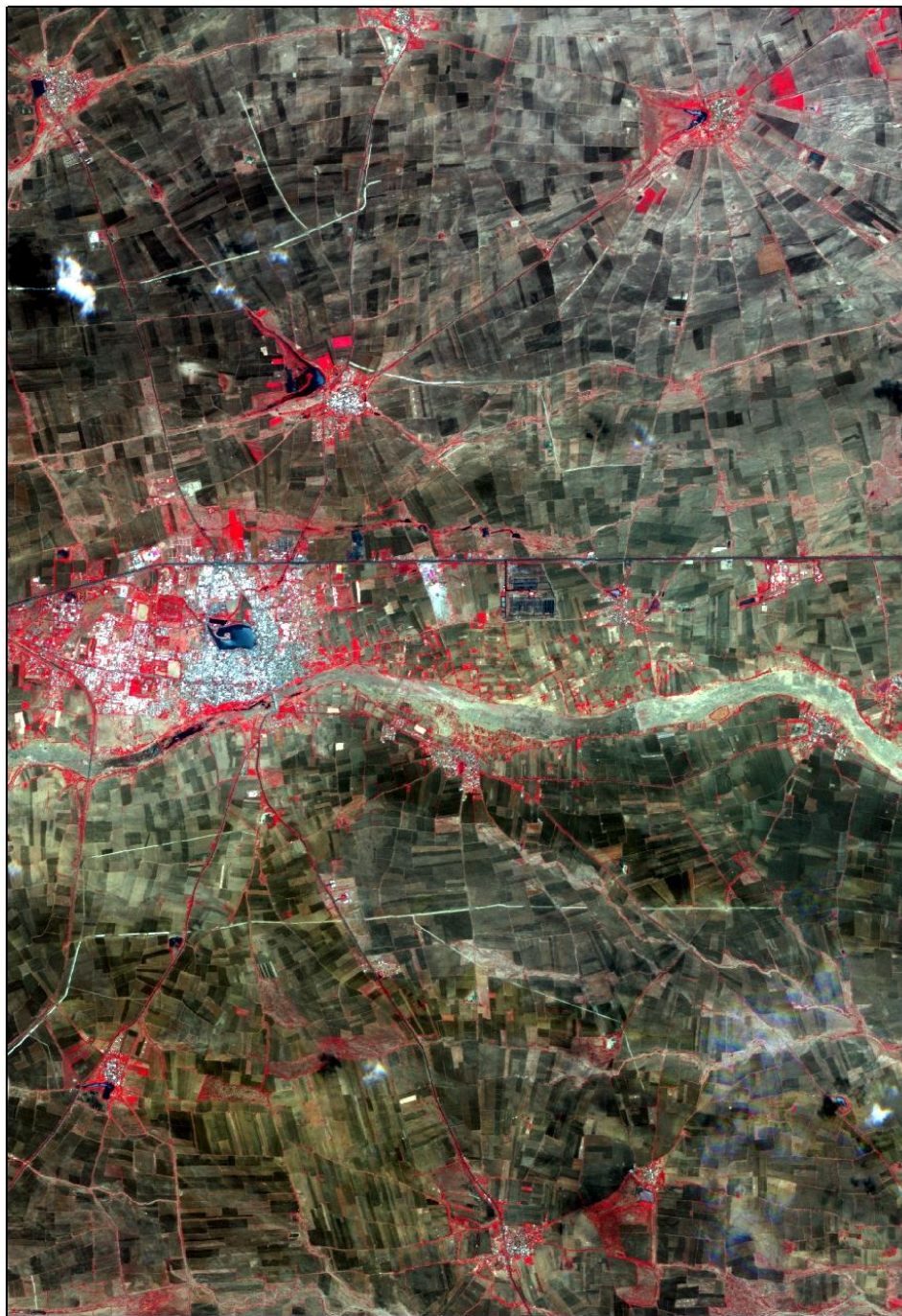
A Demonstration of Compatibility of Gujarat GIS Database



Satellite Image as Base

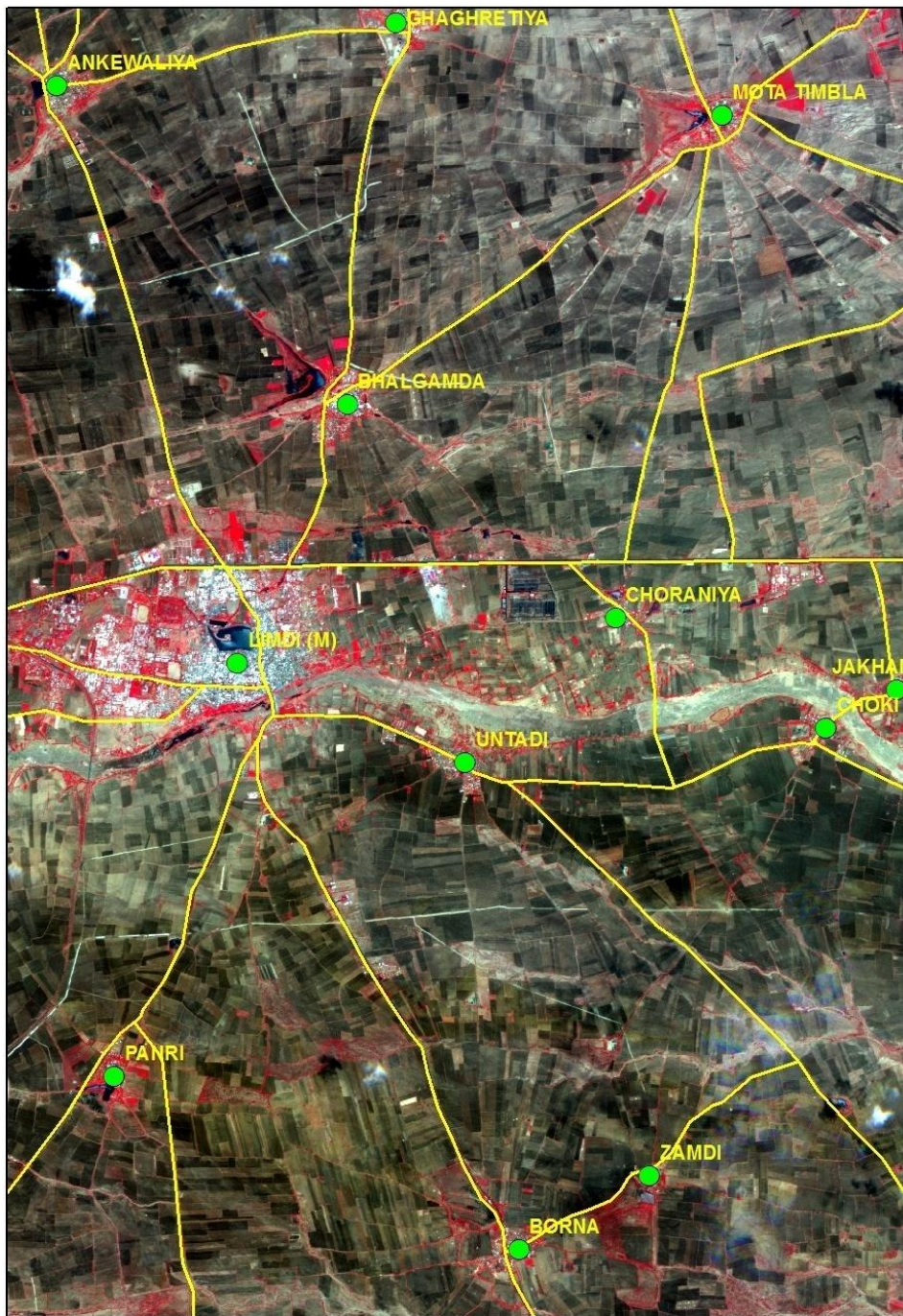
Satellite Data (Type – I)

LISS-IV



2D/3D/4D

Road Connectivity

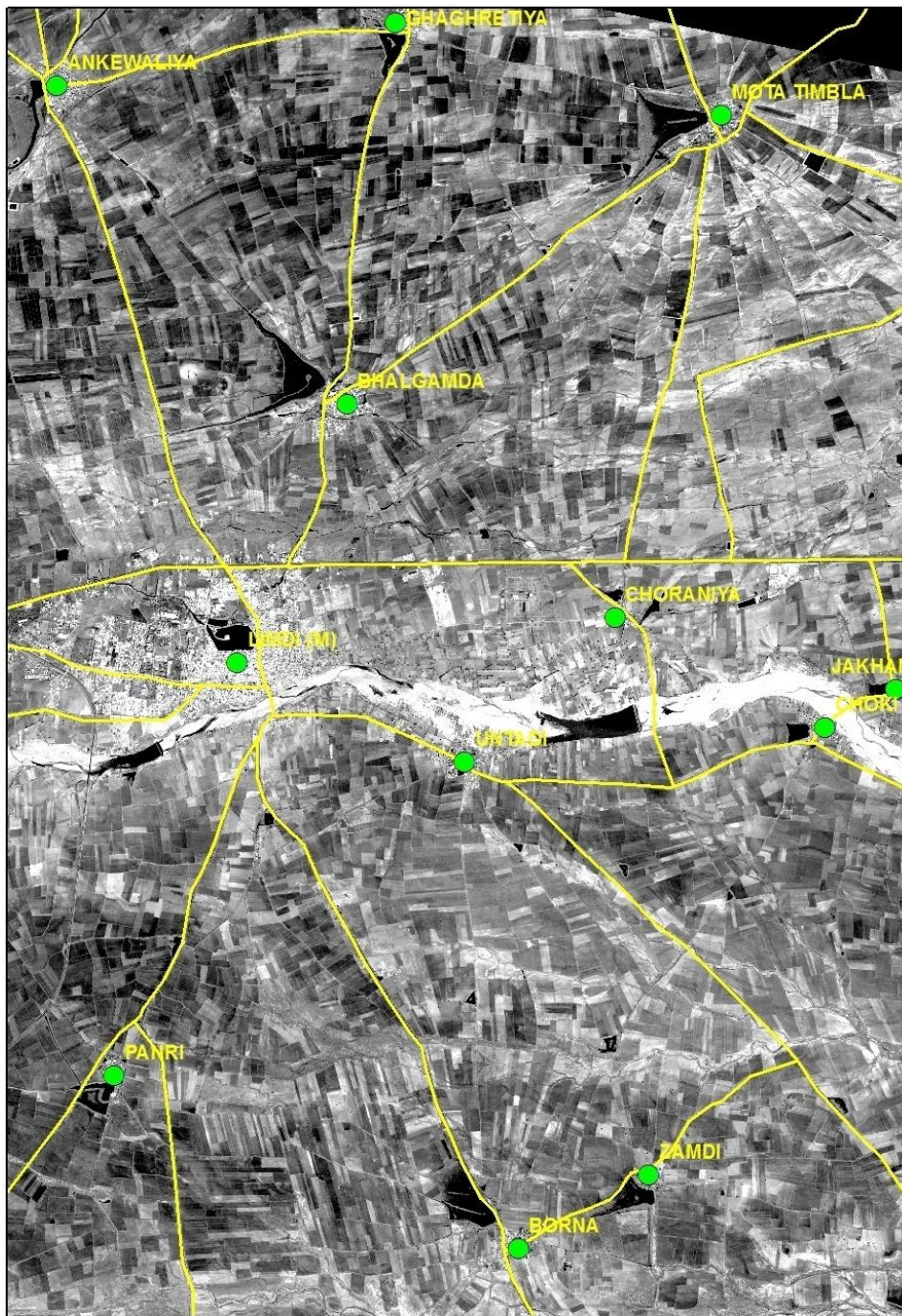


Satellite Data (Type – II)

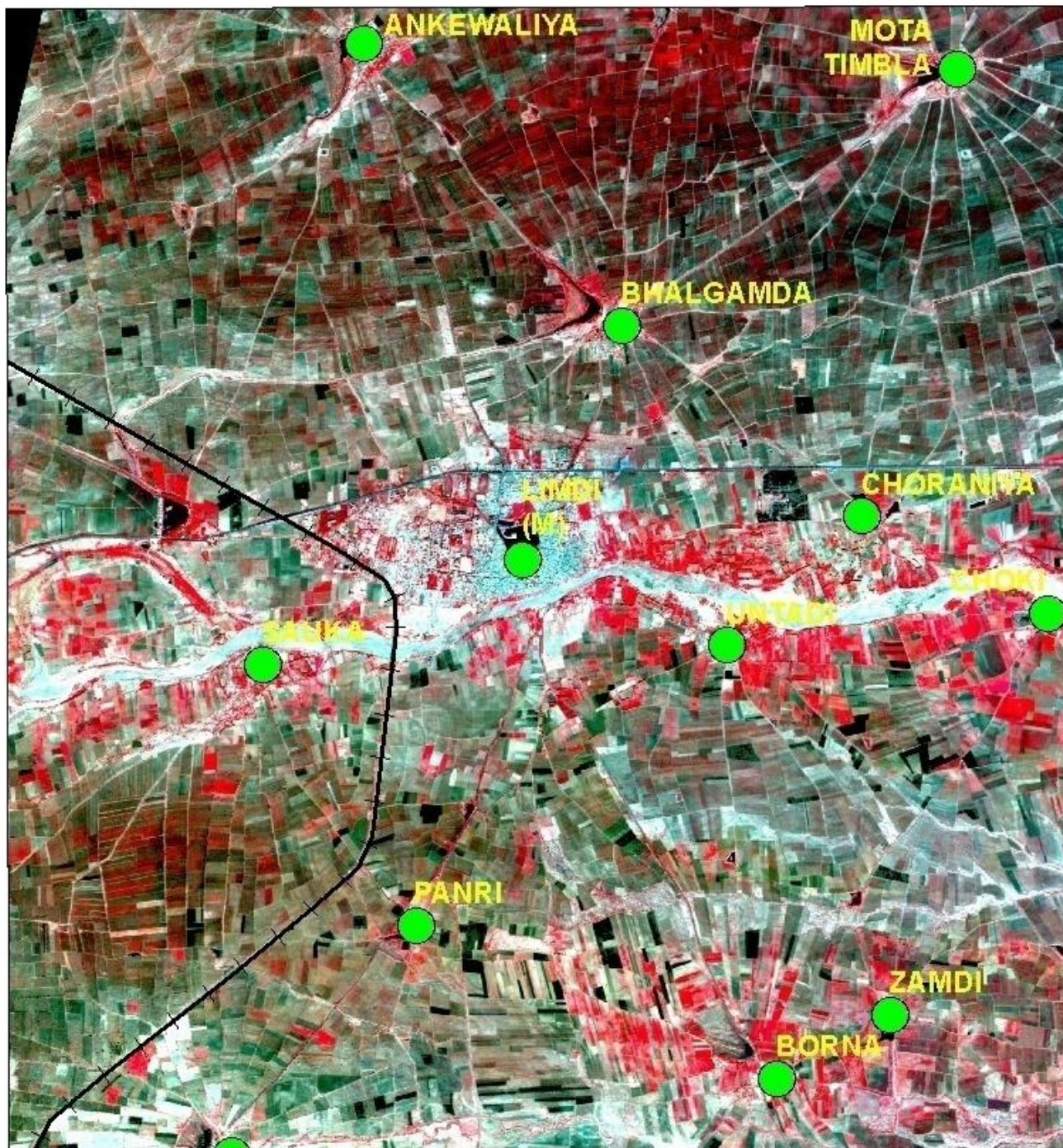
CARTOSAT- I



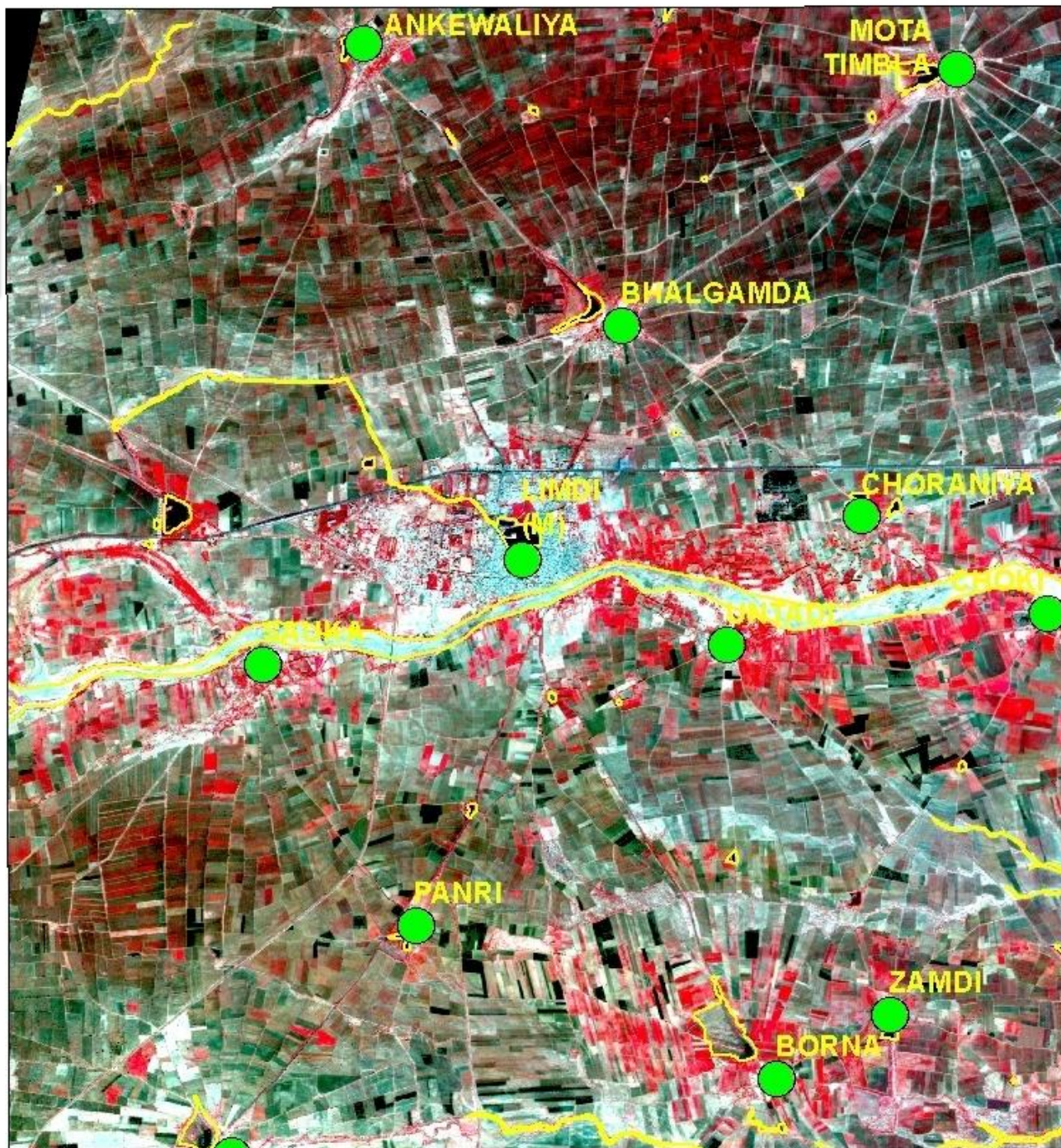
Road Connectivity



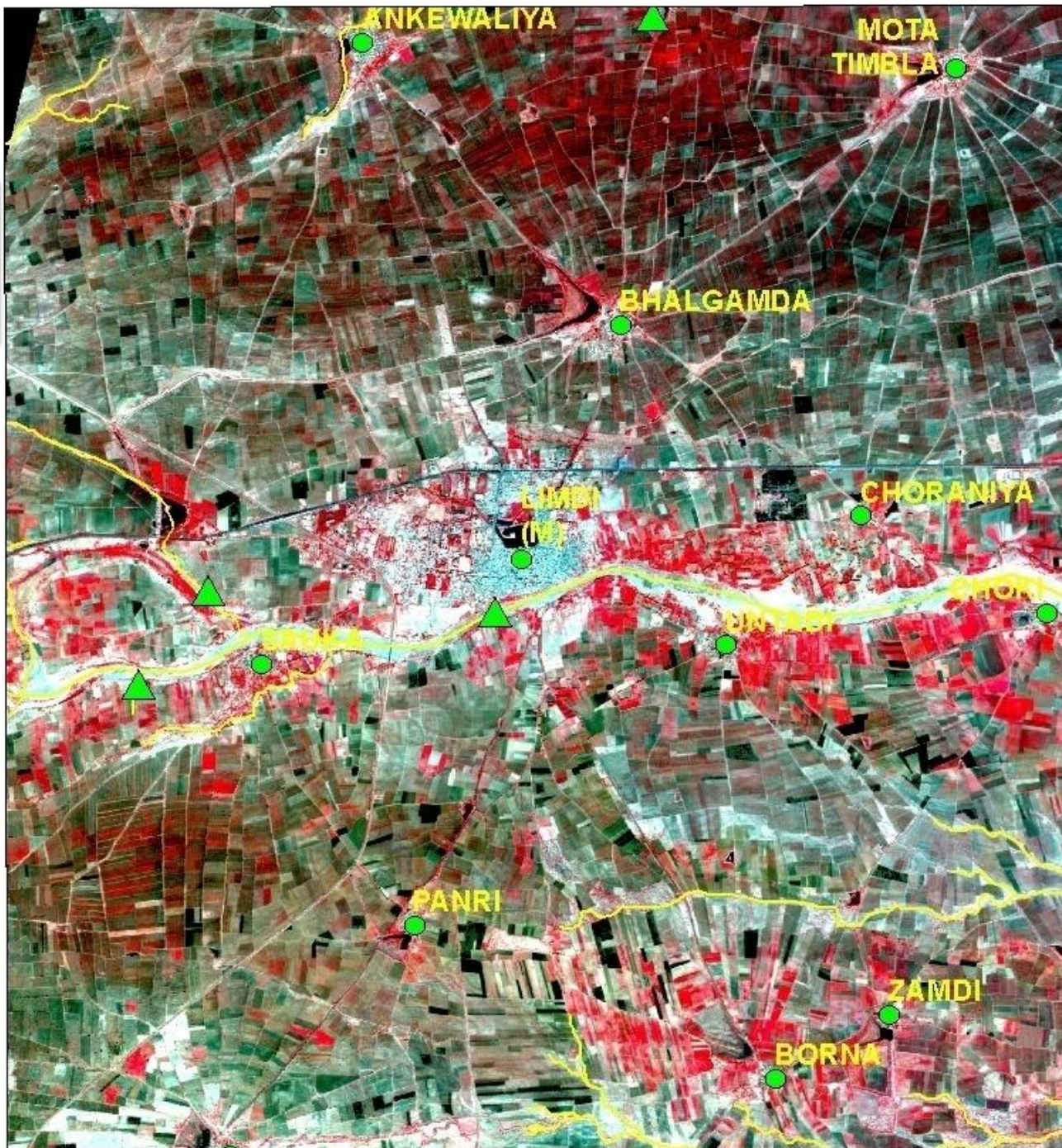
Railway Network



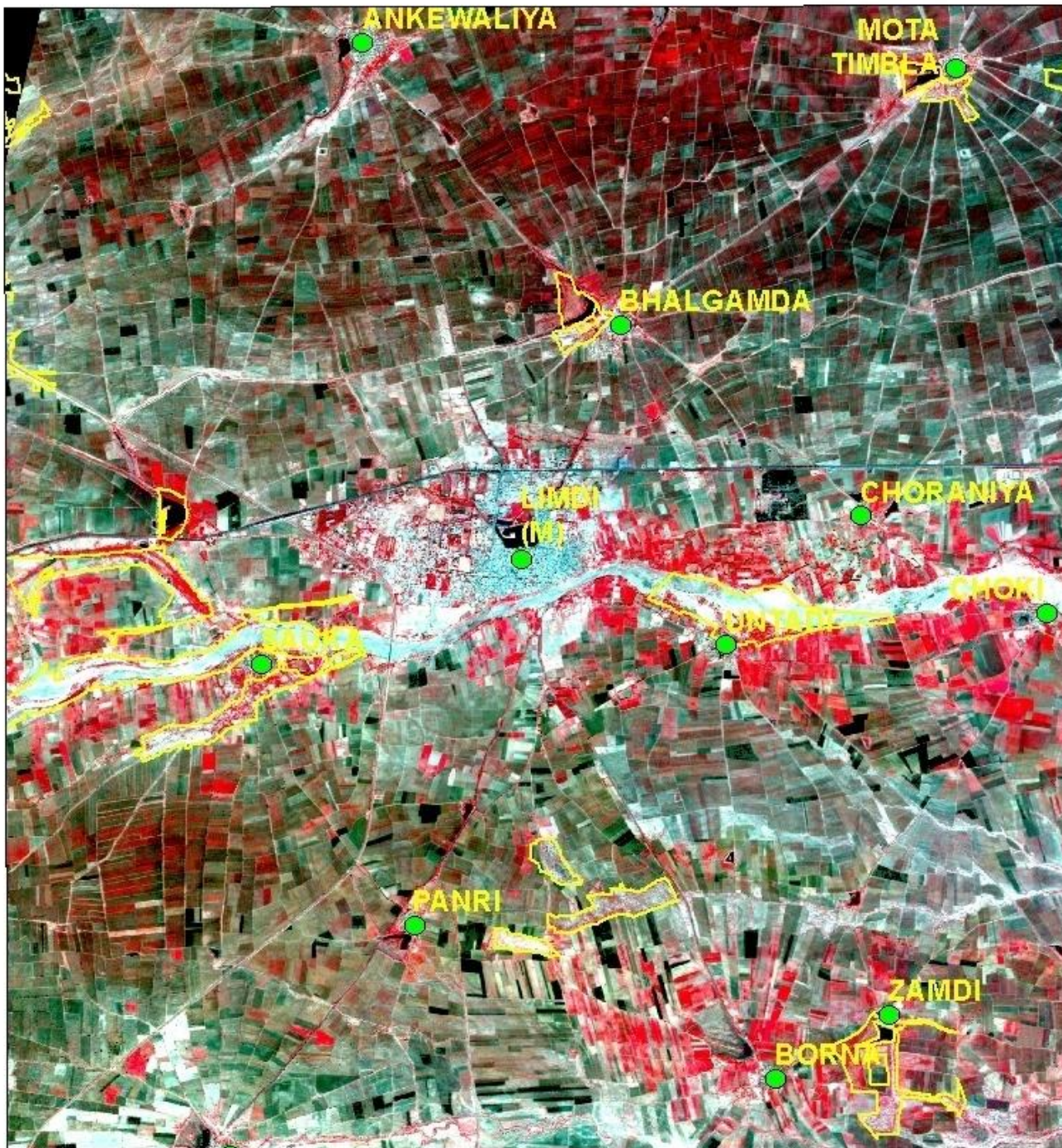
River &
Waterbody



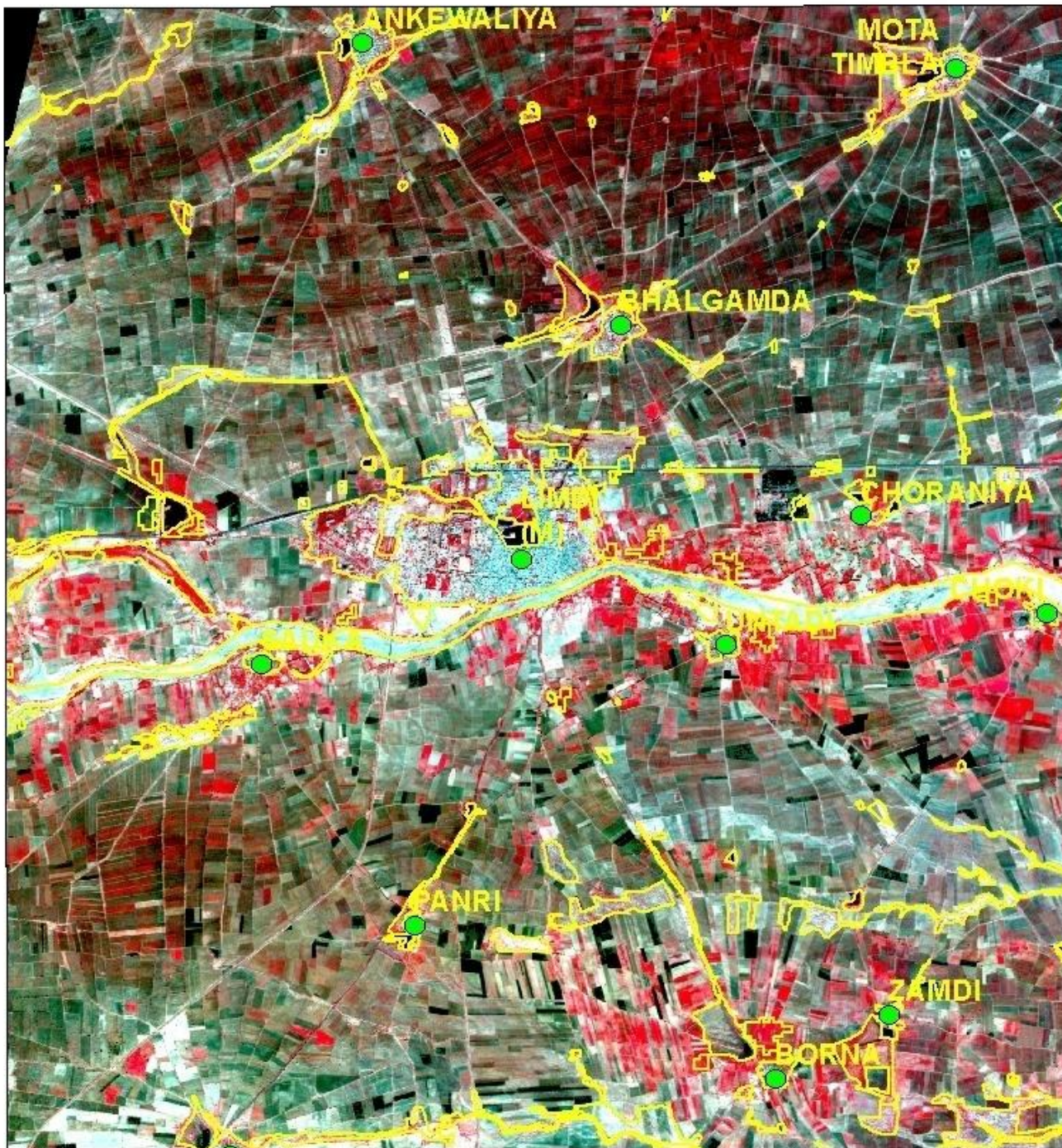
Drainage
and
Checkdams



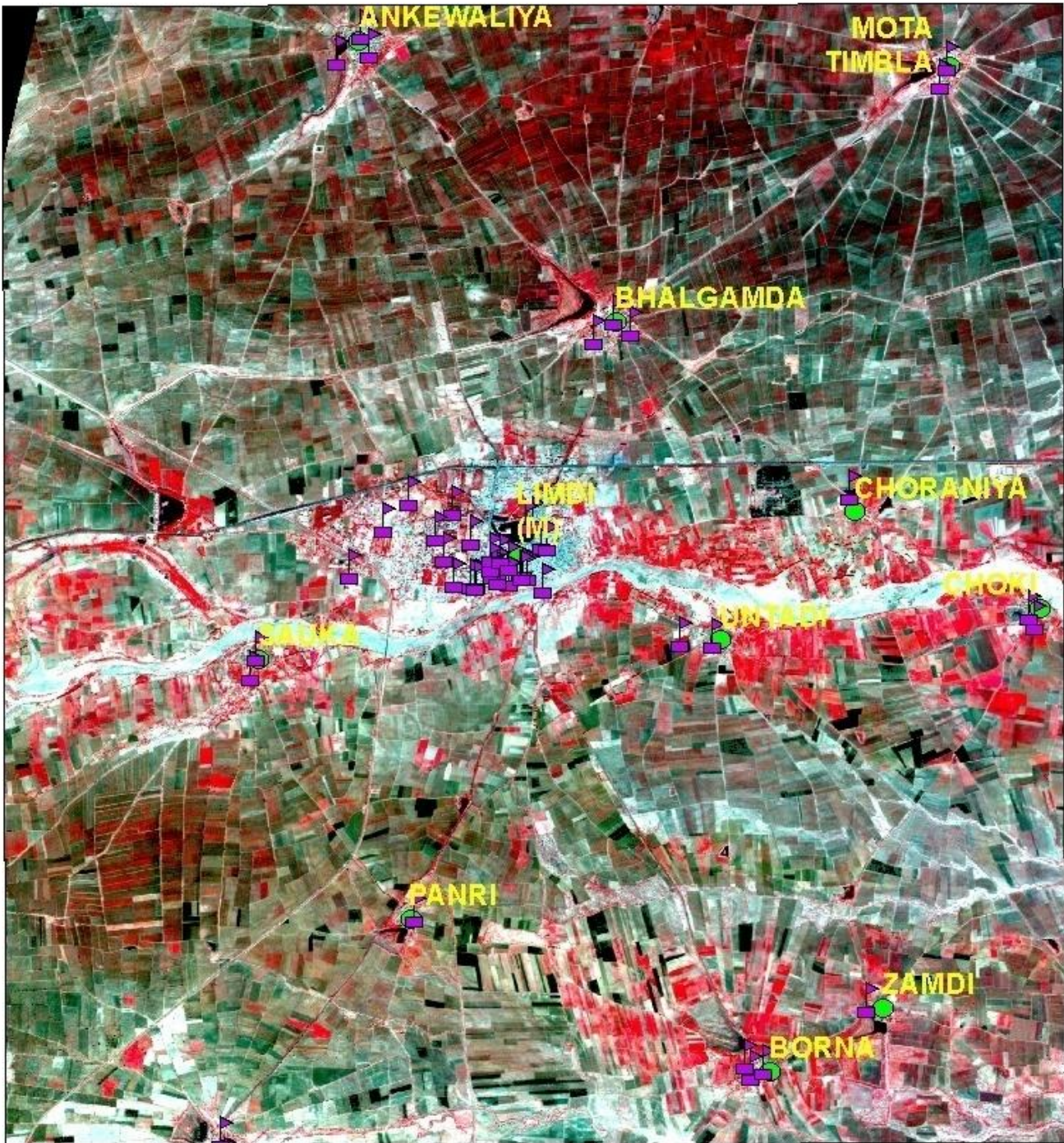
Landbank



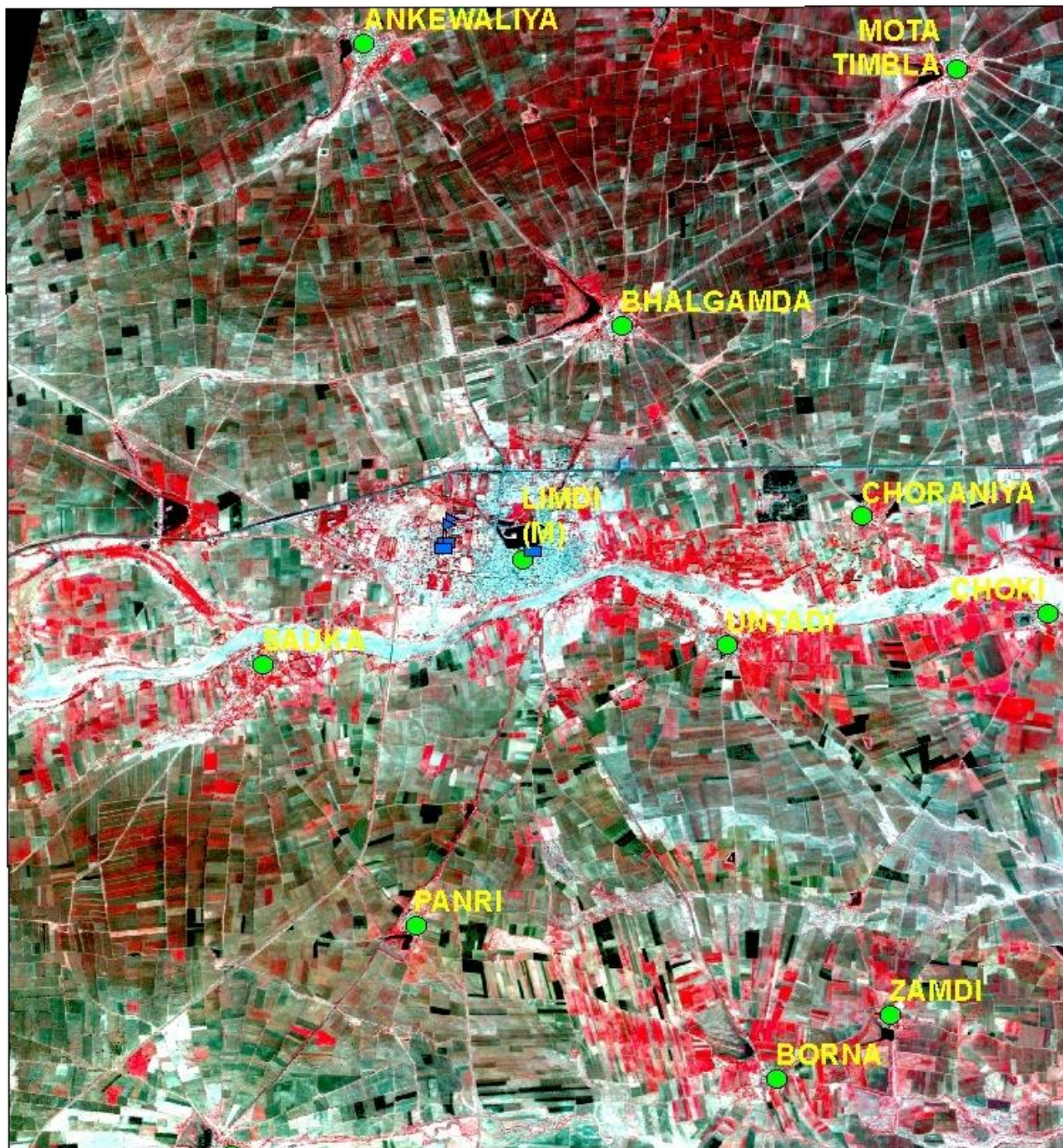
Landuse



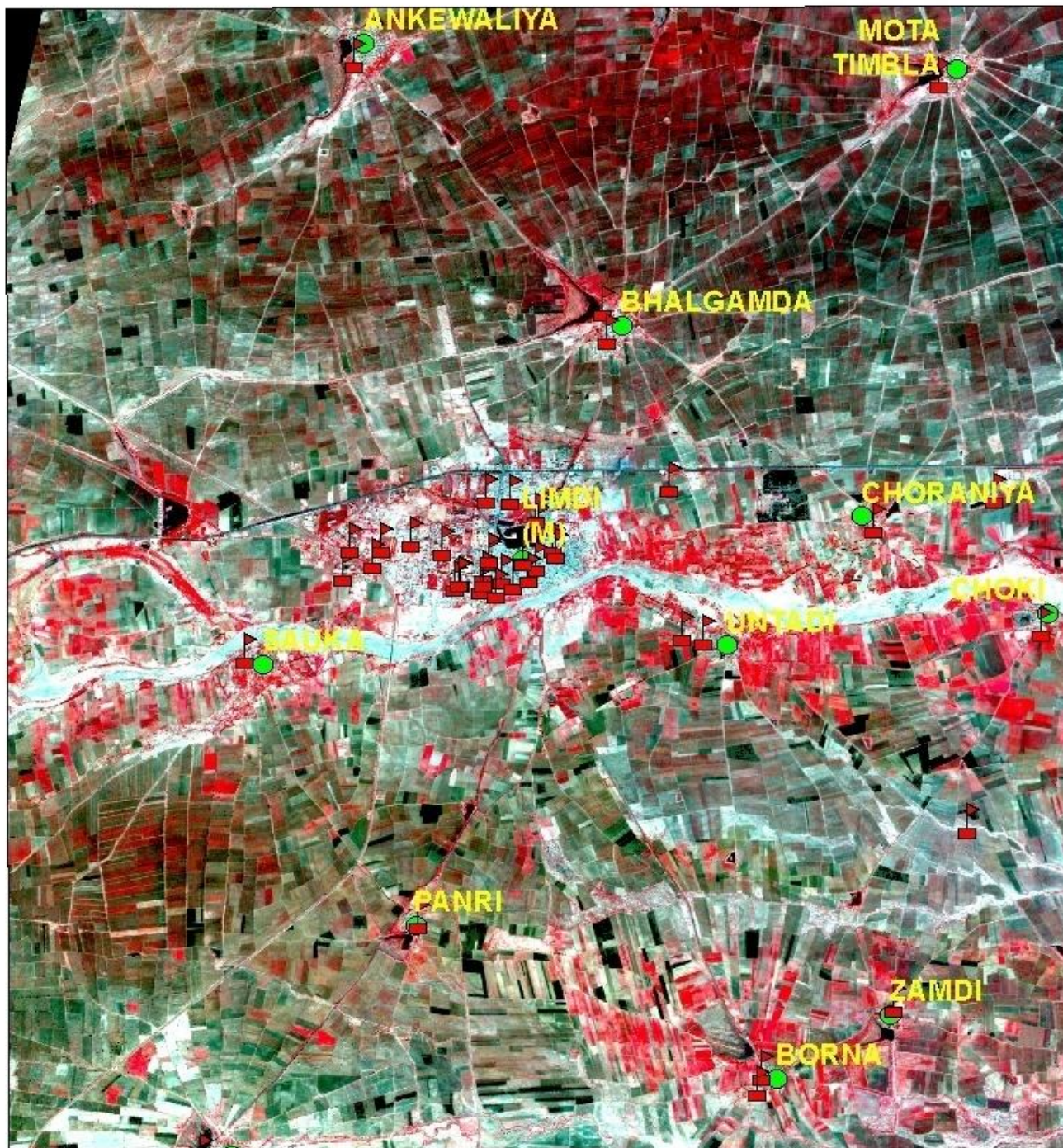
Schools



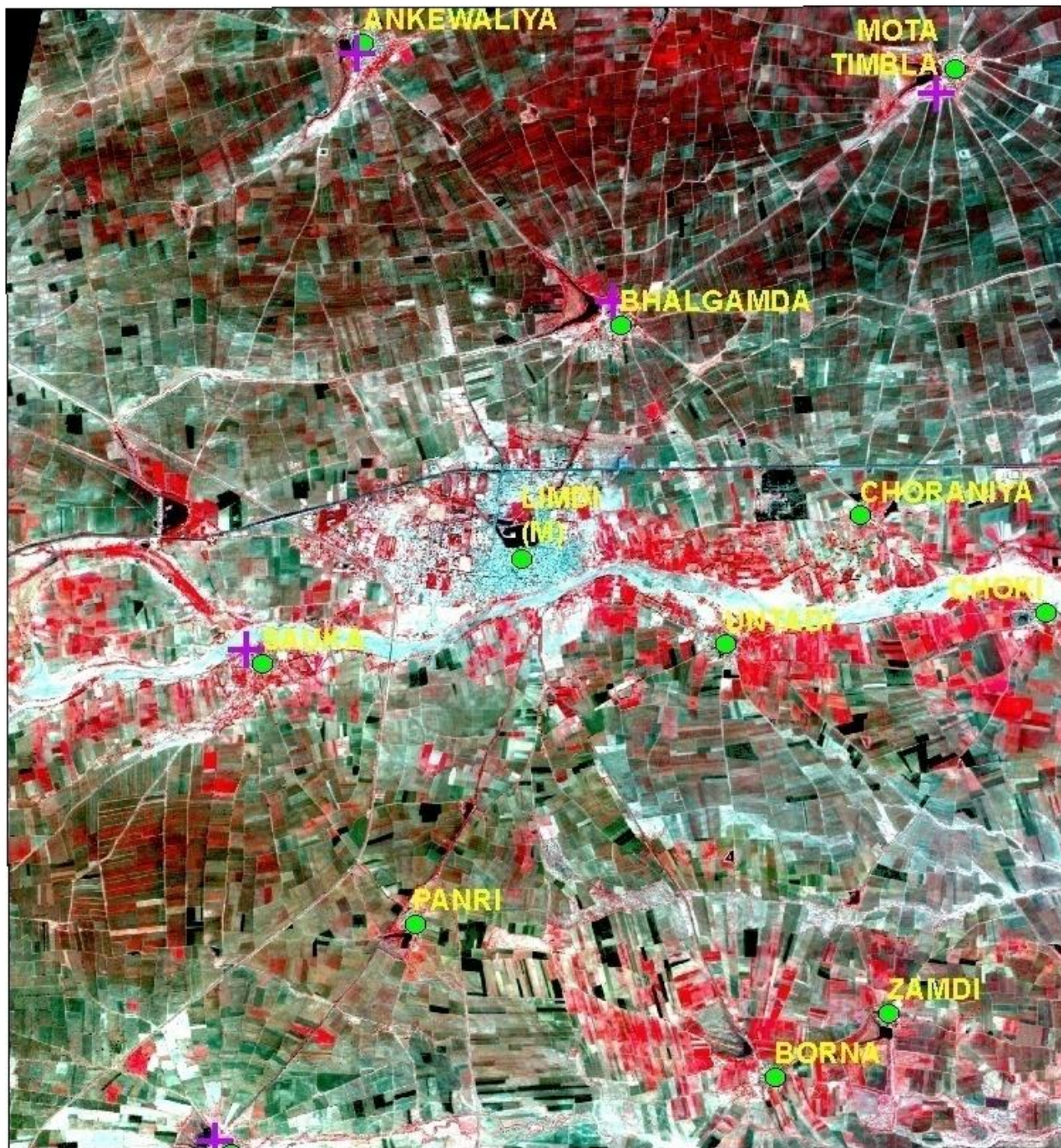
Collages



Anganvadi



Sub center

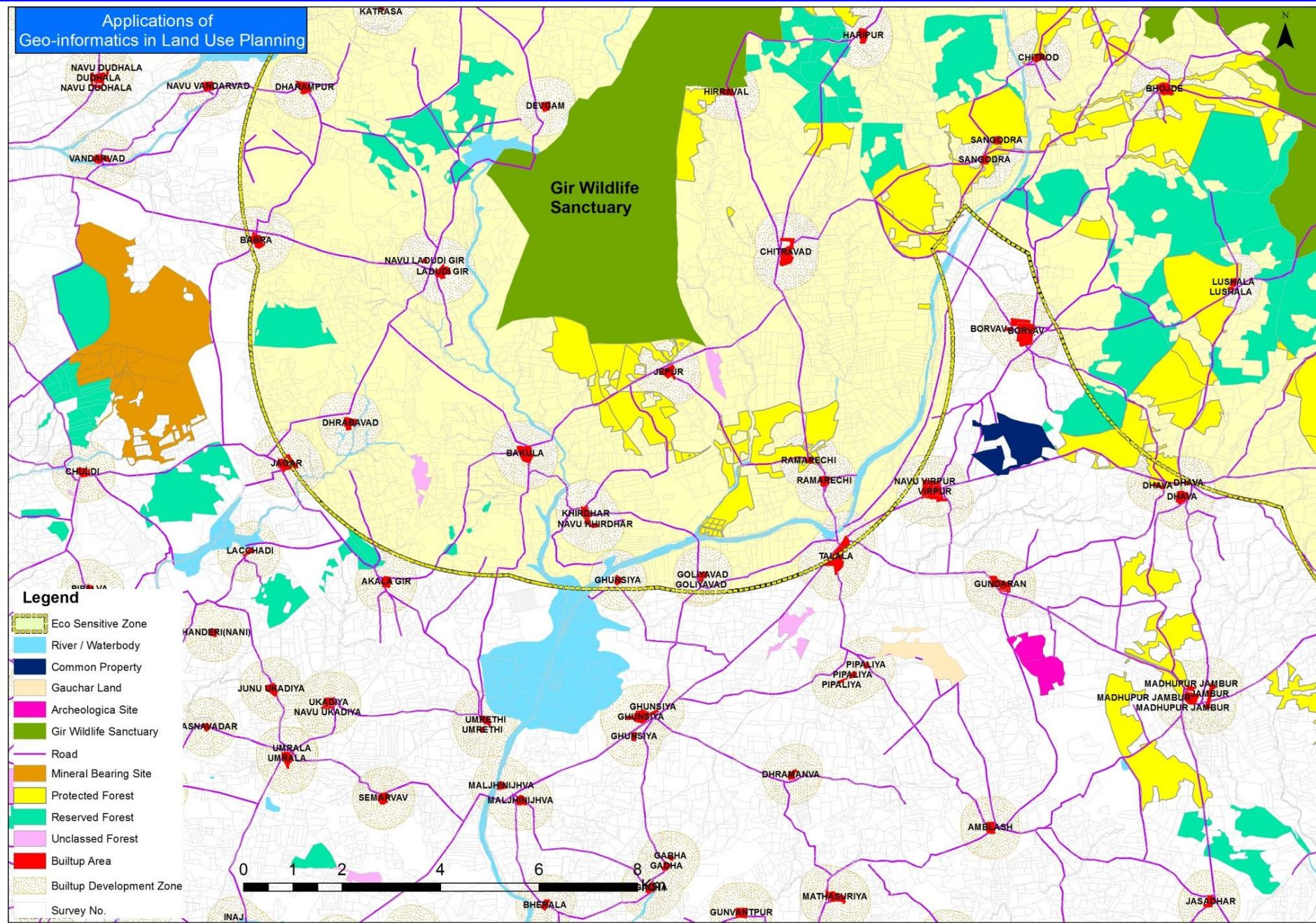


Land use- wise restriction Zones

Criteria: distance from various boundaries of :

- Sanctuary /National Parks
- Eco sensitive zones
- Forests
- Waterbody (River, Pond, Lake..)
- Habitations
- Mineralized zones
- Infrastructure (Road, Railway...)
- Heritage / Monuments
- Coastal Regulation Zones
- Gochar/Common Lands
- Man Made Hazard Zone
- Natural Hazard
- SEZ
- Wetlands

Land Use Planning & Its Development



Application Development :

- **Authenticated** location/boundaries of respective feature
- Land parcels with ownership/location details from Govt.records
- Geo-referenced Satellite Image
- Common Geo-spatial standardized database using above information
- Online Decision Support System

Parameters

Sources

Property Details

Location
Dimension
Ownership

- Revenue Map (Village, City)
- Town Planning Map

Land use

- Satellite Image, Records

Regulation Criteria

- Distance from identified Boundary

Task : Seamless Integration of above

Spatial Decision Support System

Online Availability and Approvals

Technology supports identification of particular location with respect to various boundaries

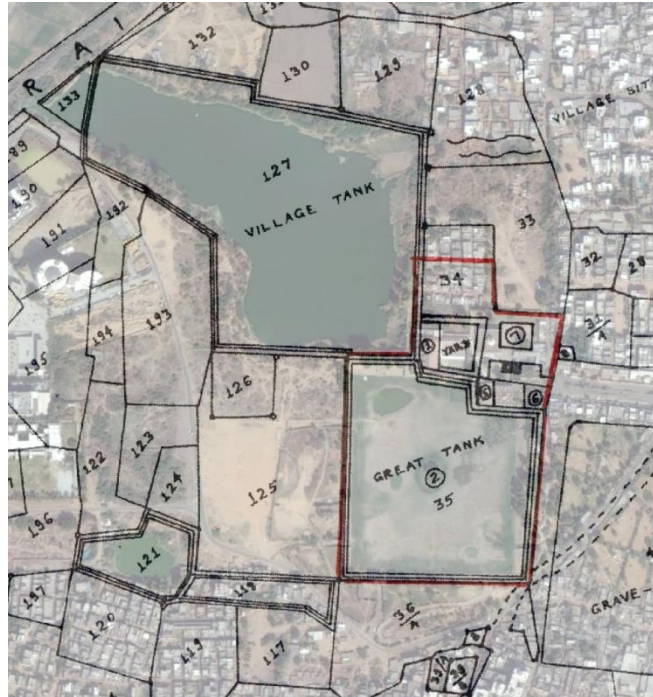
GIS ERP Application in Archaeology Sector : Regulation

Collection of
Village Map and
Site Plan

Scanning of Map

Geo-referencing
of Scanned Map
to Satellite data

Digitization of
Geo-referenced
Site and village
Map



Digitization of Site Plan

Site Plan of monuments, Geo-referencing through Satellite Images

GIS ERP Application in Archaeology Sector : Regulation

Form 1

1 Applicant Details

First Name	Middle Name	Last Name	Present Address	Permenant Address	Mobile Number	Email
Chauhan	Rahul	R	kalol	kalol	9624494466	chauhanrahul@gmail.com

2 Applicant is other than the owner ?

☒ Yes ☐ No

First Name	Middle Name	Last Name	Present Address	Permenant Address	Mobile Number	Email
chauhan	Mehul	R	kalol	kalol	8349568965	chauhanmehul@gmail.com

3 Whether the property is owned by the individual or jointly ?

☒ Yes ☐ No

Upload Document

No file selected.

4 Whether the property is owned by Government/Public Sector Undertaking/Private Sector Undertaking Firm ?

Government

Complete Address

Gandhinagar

5 Locality of the proposed construction (with full details plot number, etc.)

Rural

State

Gujarat

District

Ahmedabad

Taluka

Ahmedabad City

Village

Makarba (CT)

R.S Number

100

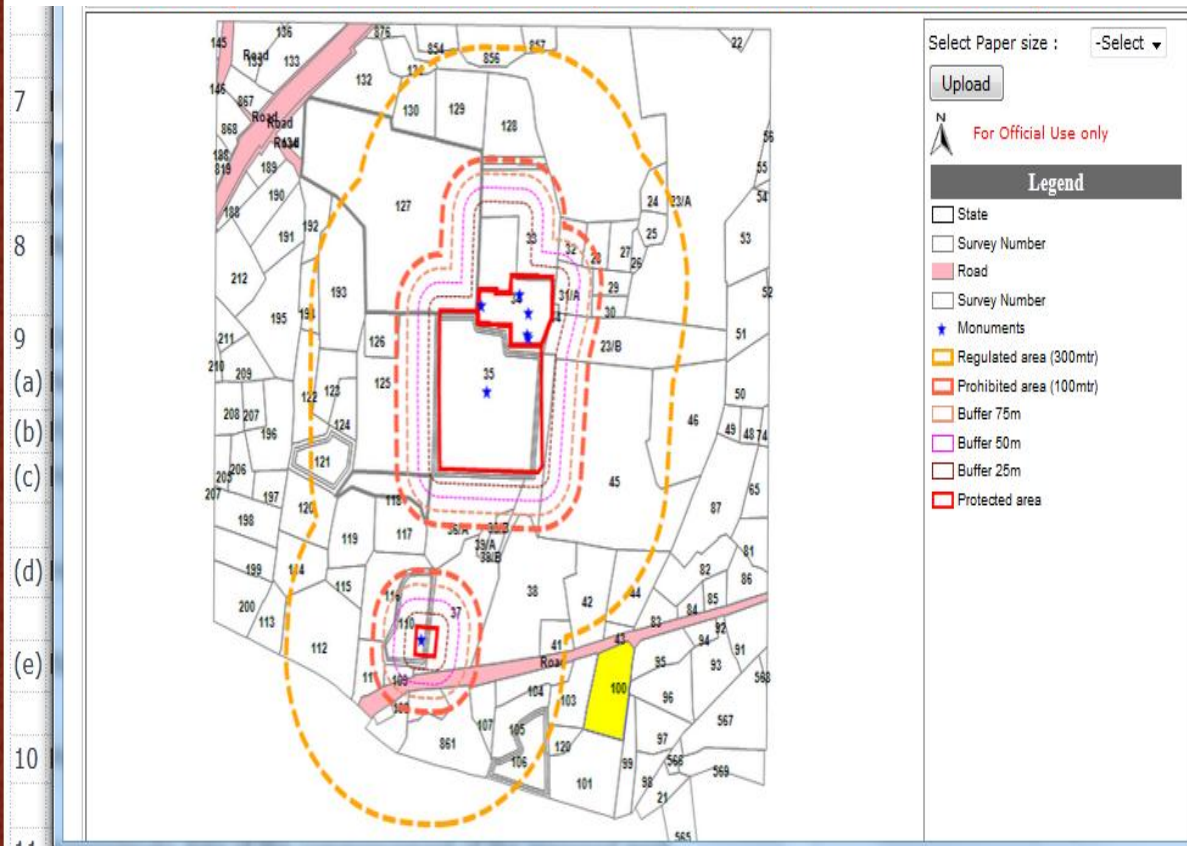
Online Application System

GIS ERP Application in Archaeology Sector : Regulation

Village
R.S Number
Generated Map is already attached here

Makaroda (CT)
100
Generate Map

You are eligible for Construction/Reconstruction as per existing rules. Survey no : 100 is in out side Regulated area



Online Application System

GIS Application in Agriculture Sector

Water Harvesting Structure

- Online applications of farmers through **ikhedut** web portal
- Eligibility through e-Dhara (land records)
- Field-wise suitability and approval based on 2D/3D satellite image interpretation (online)
- Post execution evaluation through satellite image interpretation
- GIS based “Water Harvesting Structure” Decision Support System

Applications of Geo-informatics in Agriculture

Online applications of farmers through **ikhedut** web portal

Web Portal for Agriculture & Co-operation Department, Government of Gujarat - Mozilla Firefox

https://ikhedut.gujarat.gov.in/Master/frm_PreWorkRemarks.aspx

 **Agriculture & Co-operation Department**
Government of Gujarat

Office : Bhaskaracharya Inst. for Space Application and Geo Informatics(BISAG) Gujarat User Name : VIJAY SURENDRA SINGH Designation : Project Manager Login Date : Mar 2 2015 4:36PM Last Login Date : Mar 2 2015 9:05AM

[Home](#) [KM](#) [Dealer](#) [Reports](#) [Query](#) [Summary](#) [Log Out](#)

Summary Query Reports BISAG

:: Prework Remarks ::

PREWORK REMARKS :-

AppID : 2014-15/I/299826 AppIDt : 11/11/2014
Applicant's Name : INDRAPURA Ghatak Name : ગામ વખાવો નવા/ઉંડા કરવા અને inlet/outlet બનાવવા/મરામત કરવા
Khata No : 85 Village : ઈન્દ્રપુરા
Survey No :

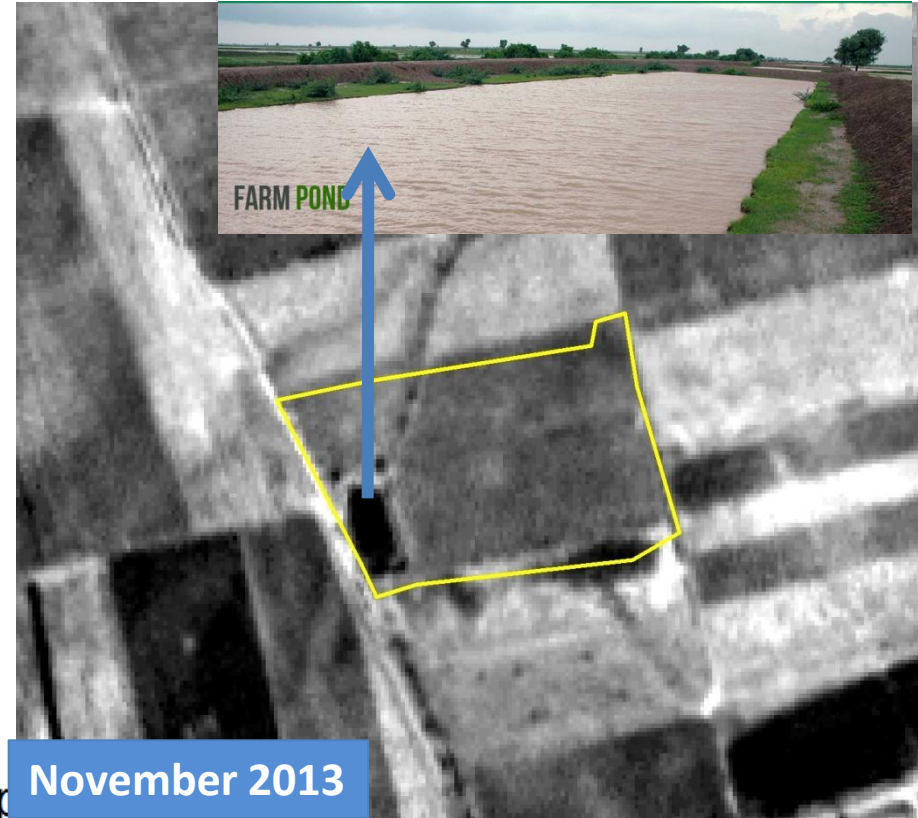
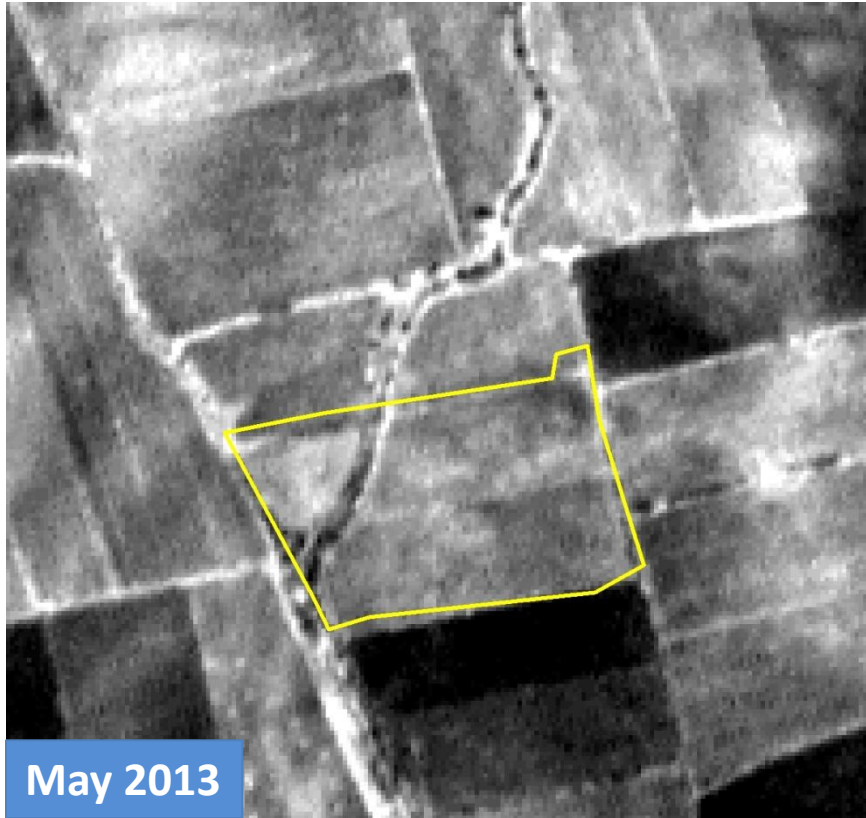
અનુ નં.	UID	ખાતા નંબર	સર્વે નંબર	કુલ વિસ્તાર (હેક્ટર)	BISAG Remarks
1	48979	85	11	1.8312	ના : આ પોલના ટેકાની ભાલત અચાઉં કાર્કિત થયેલ નથી.
2	48980	85	56	0.3035	ના : આ પોલના ટેકાની ભાલત અચાઉં કાર્કિત થયેલ નથી.
3	48981	85	83	0.6171	હા : આ પોલના ટેકાની ભાલત અચાઉં કાર્કિત થયેલ છે.
4	48982	85	100	1.4245	ના : આ પોલના ટેકાની ભાલત અચાઉં કાર્કિત થયેલ નથી.

અરજીનું સ્ટેટસ અપડેટ કરવું ? ☒ Yes

Remark
Work can be done

Applications of Geo-informatics in Agriculture

Water conservation through farm pond

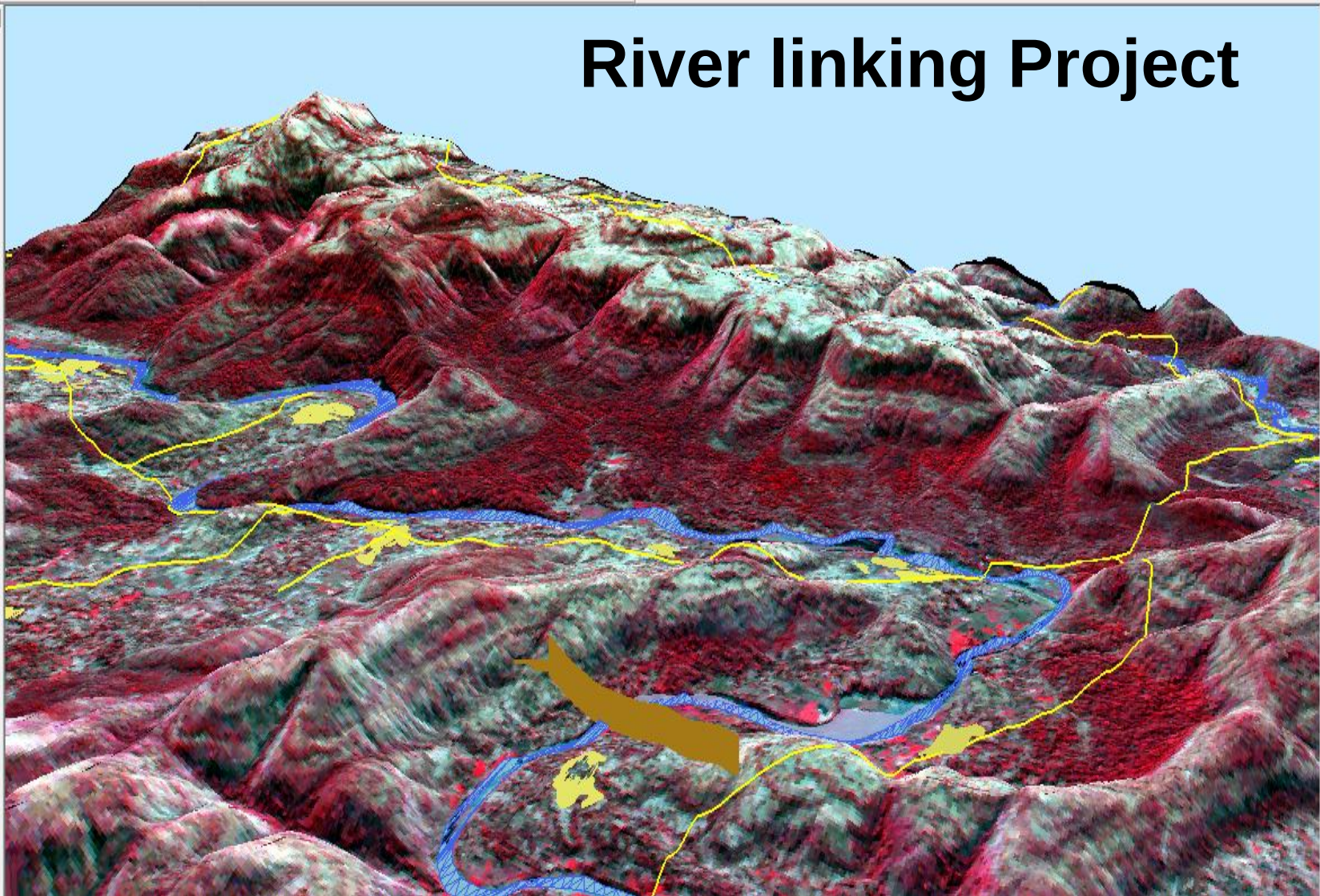
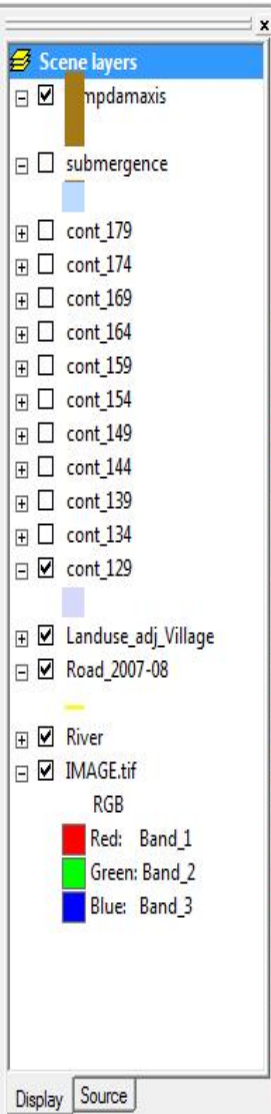


District wise/ Village wise/ Survey No. wise details of water bodies.

Name of Scheme:		SLC-8		MARCH TO APRIL Month 2009-2010 Year ending												(financial Rs. in Lakh)	
District Name	Taluka Name	Name of Village	survey number	details of water harvesting												Total	
				Farm Pond (No.)	Expenditure (Rs.)	Sim Talav di	Expenditure (Rs.)	WHS masonry (No.)	Expenditure (Rs.)	WHS Earthen (No.)	Expenditure (Rs.)	Village Pond (No.)	Expenditure (Rs.)	Percolation tank (No.)	Expenditure (Rs.)		
3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
MORBI	KERALA	175P2	1	0.27												1	

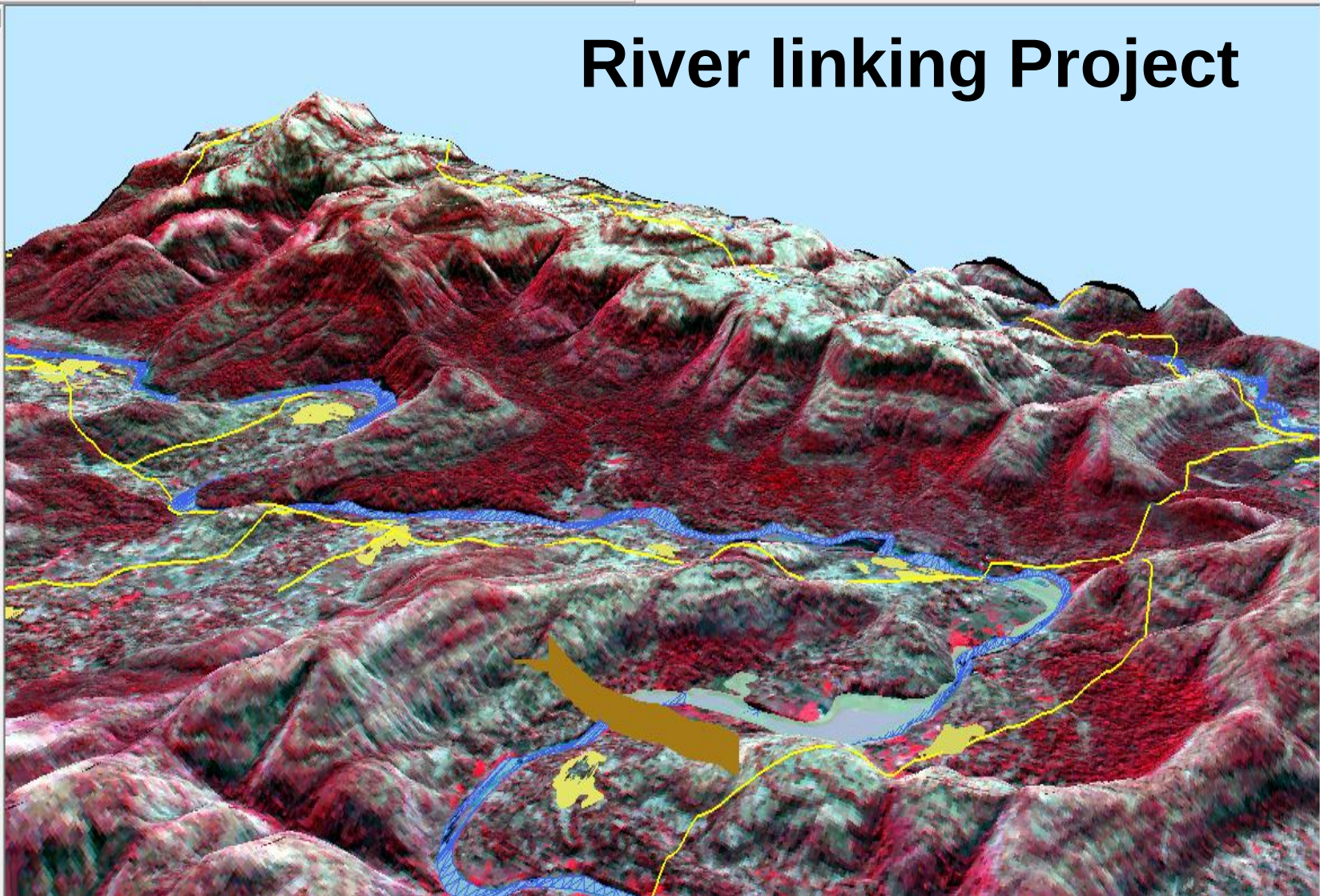
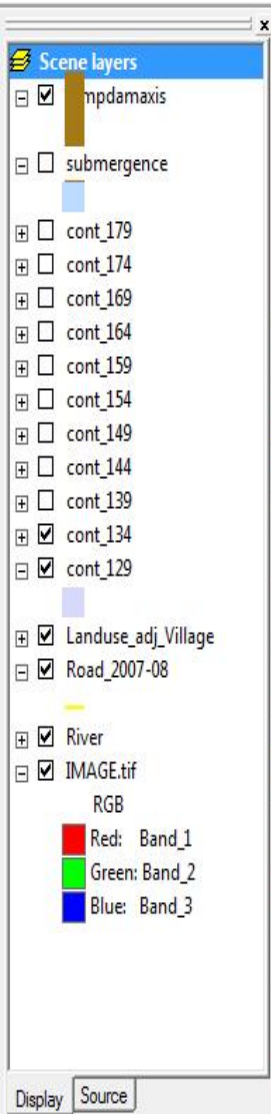
INDIAN REMOTE SENSING SATELLITE 3D IMAGE

River linking Project



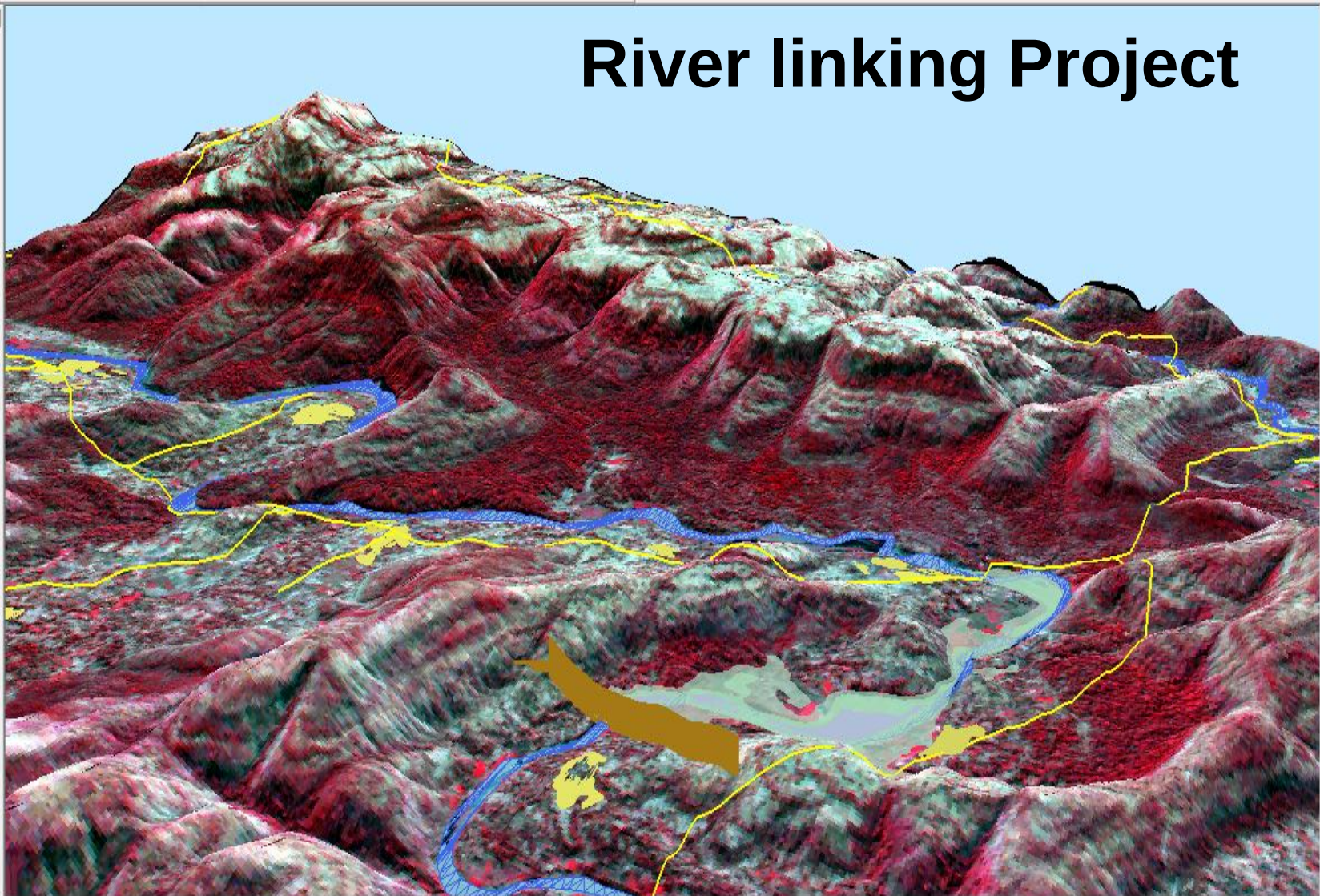
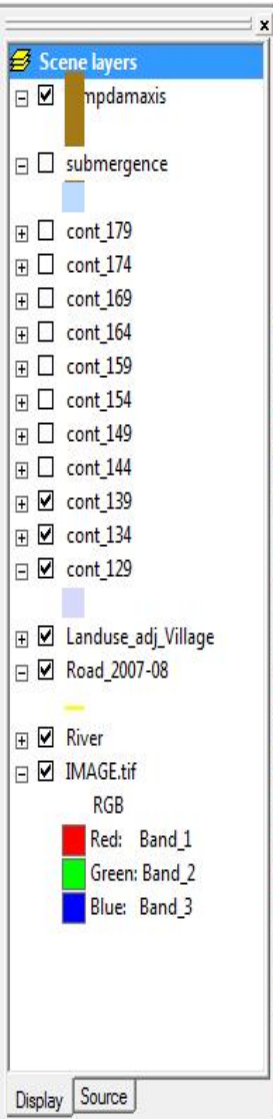
INDIAN REMOTE SENSING SATELLITE 3D IMAGE

River linking Project



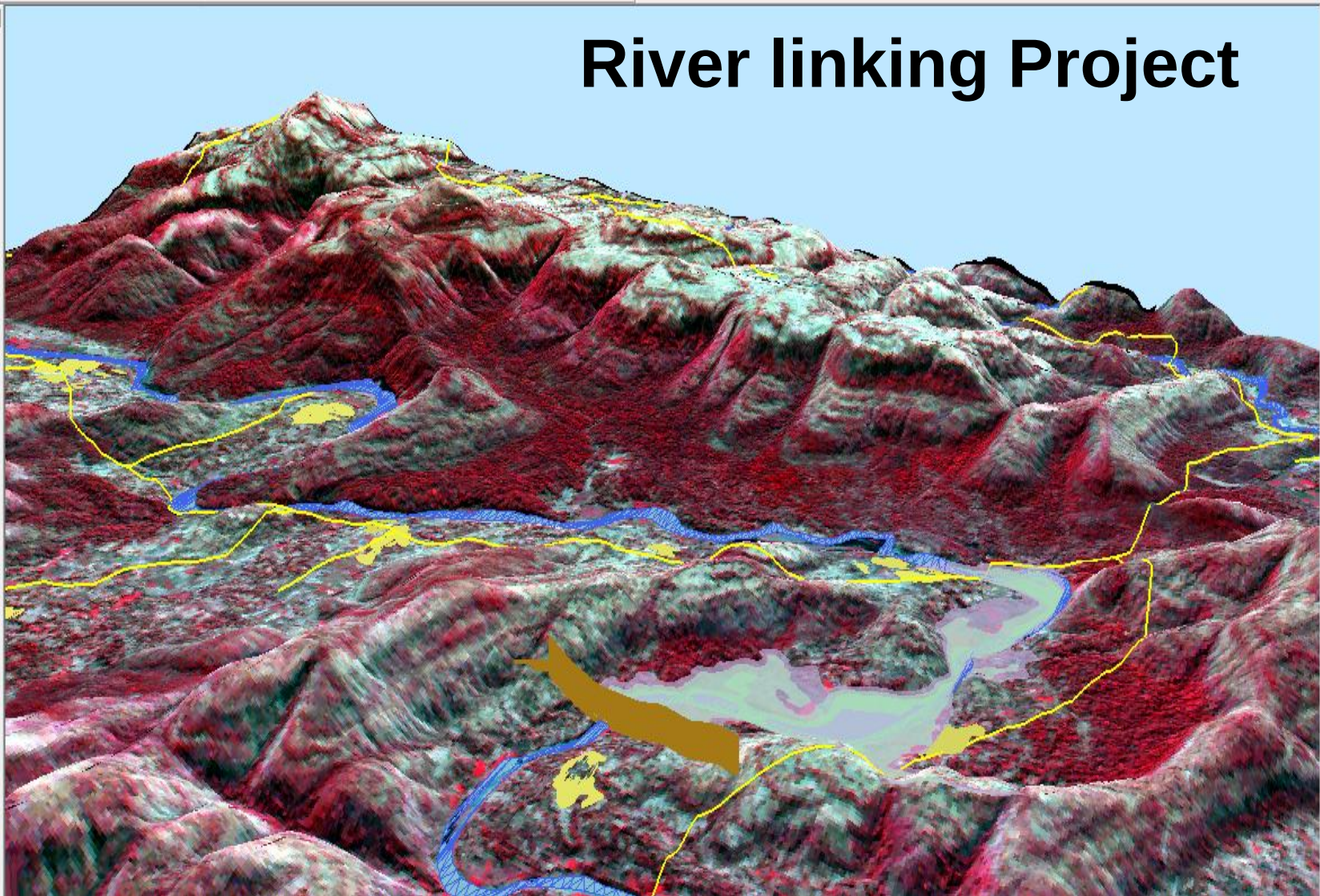
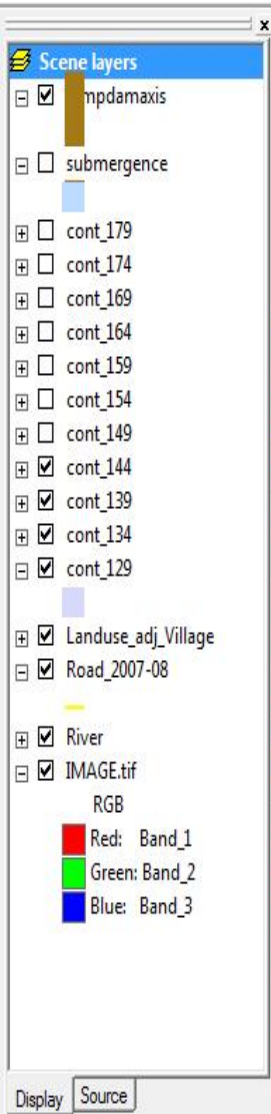
INDIAN REMOTE SENSING SATELLITE 3D IMAGE

River linking Project



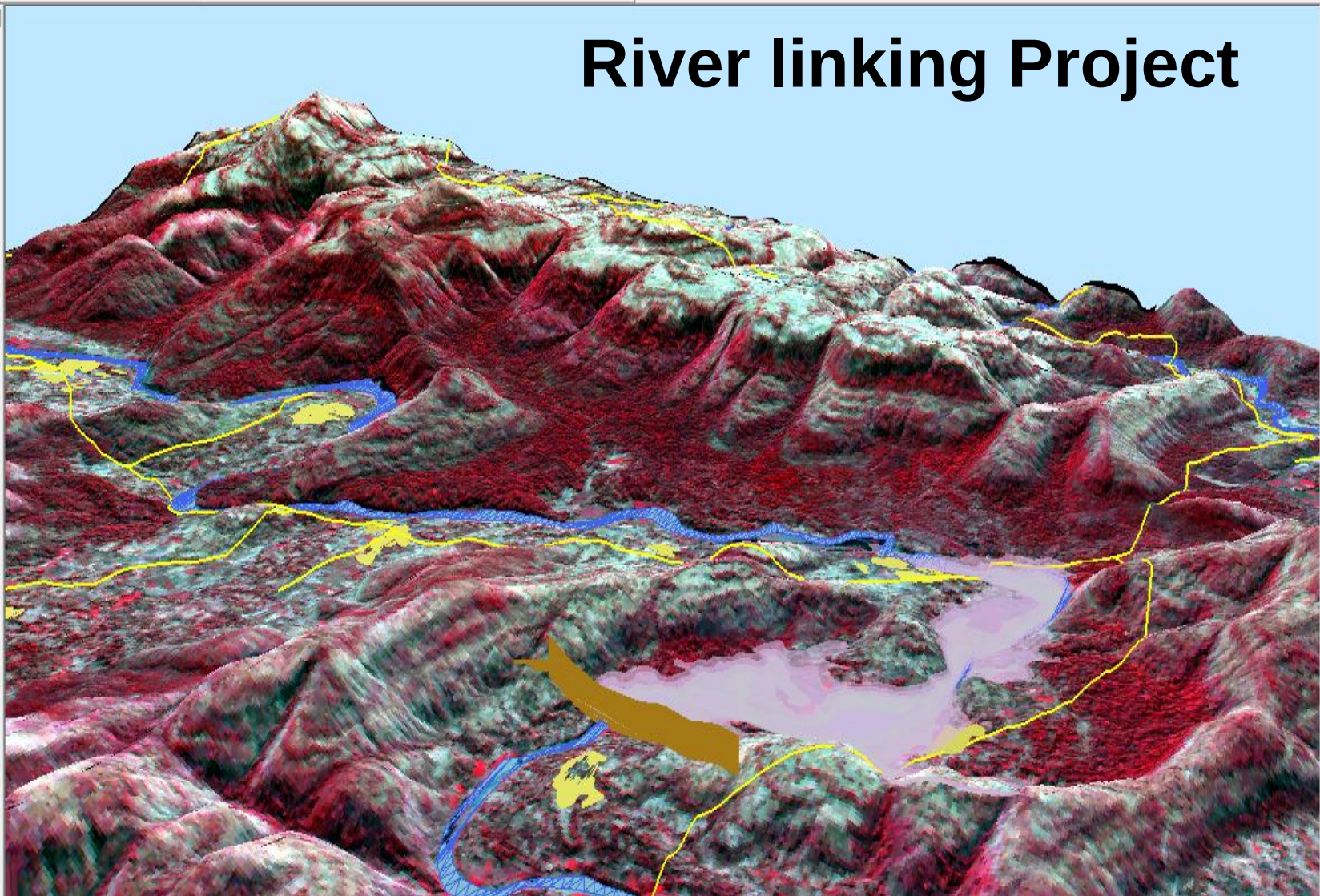
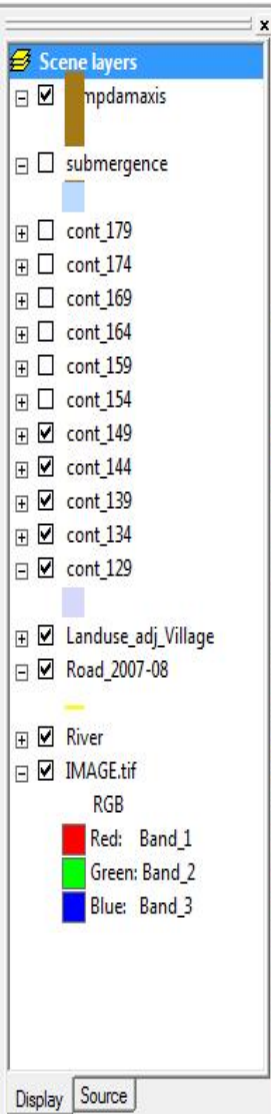
INDIAN REMOTE SENSING SATELLITE 3D IMAGE

River linking Project



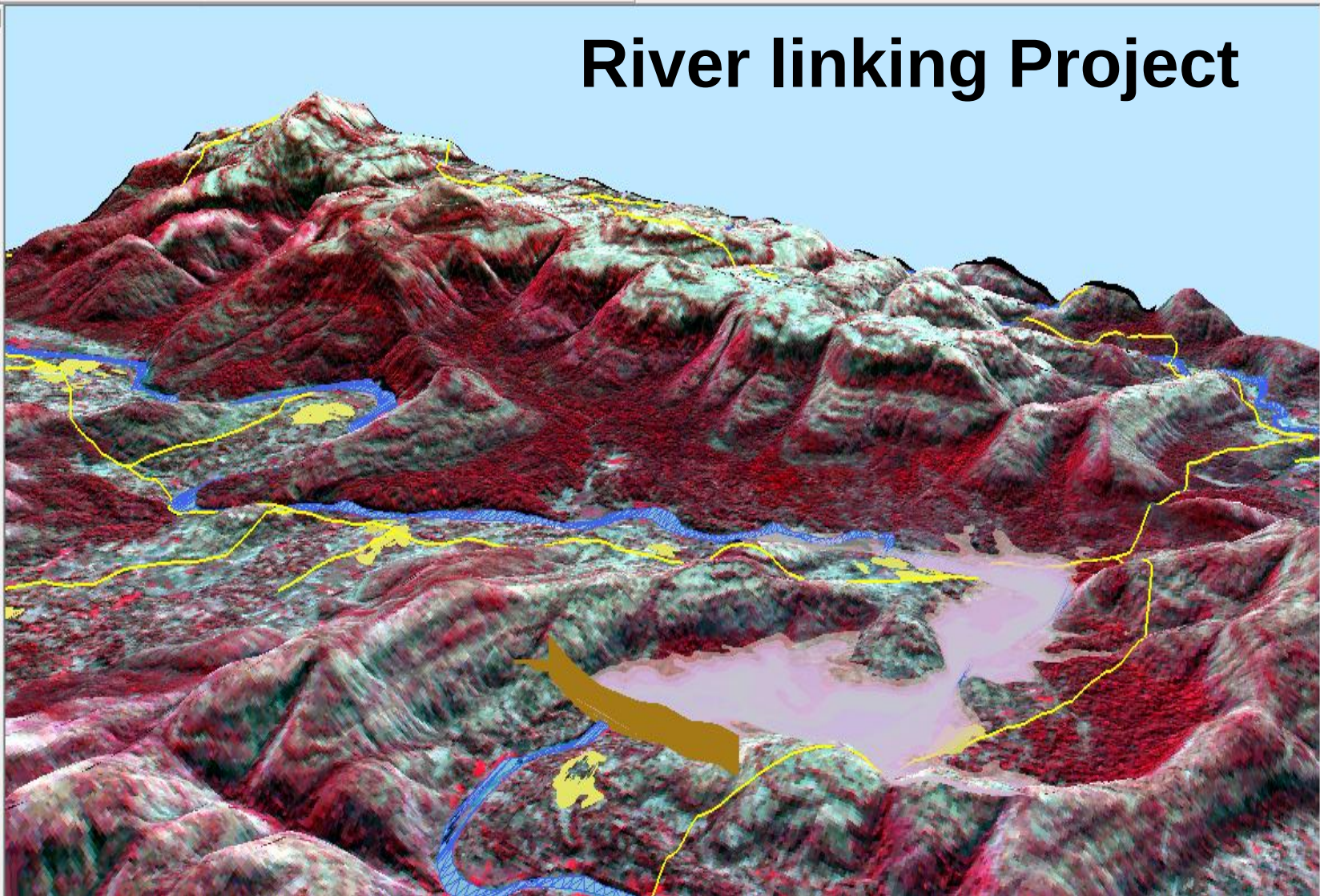
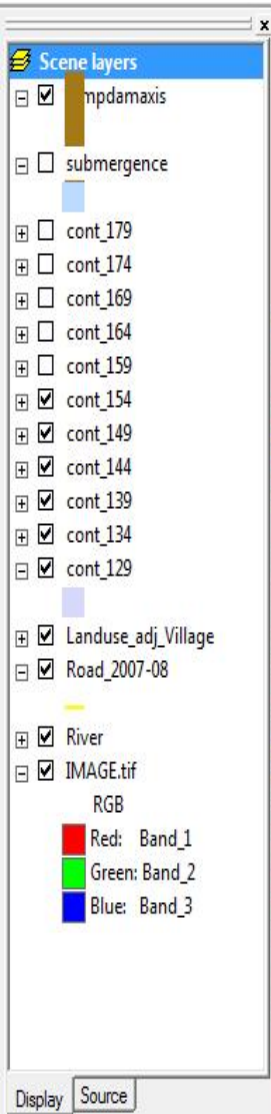
INDIAN REMOTE SENSING SATELLITE 3D IMAGE

River linking Project



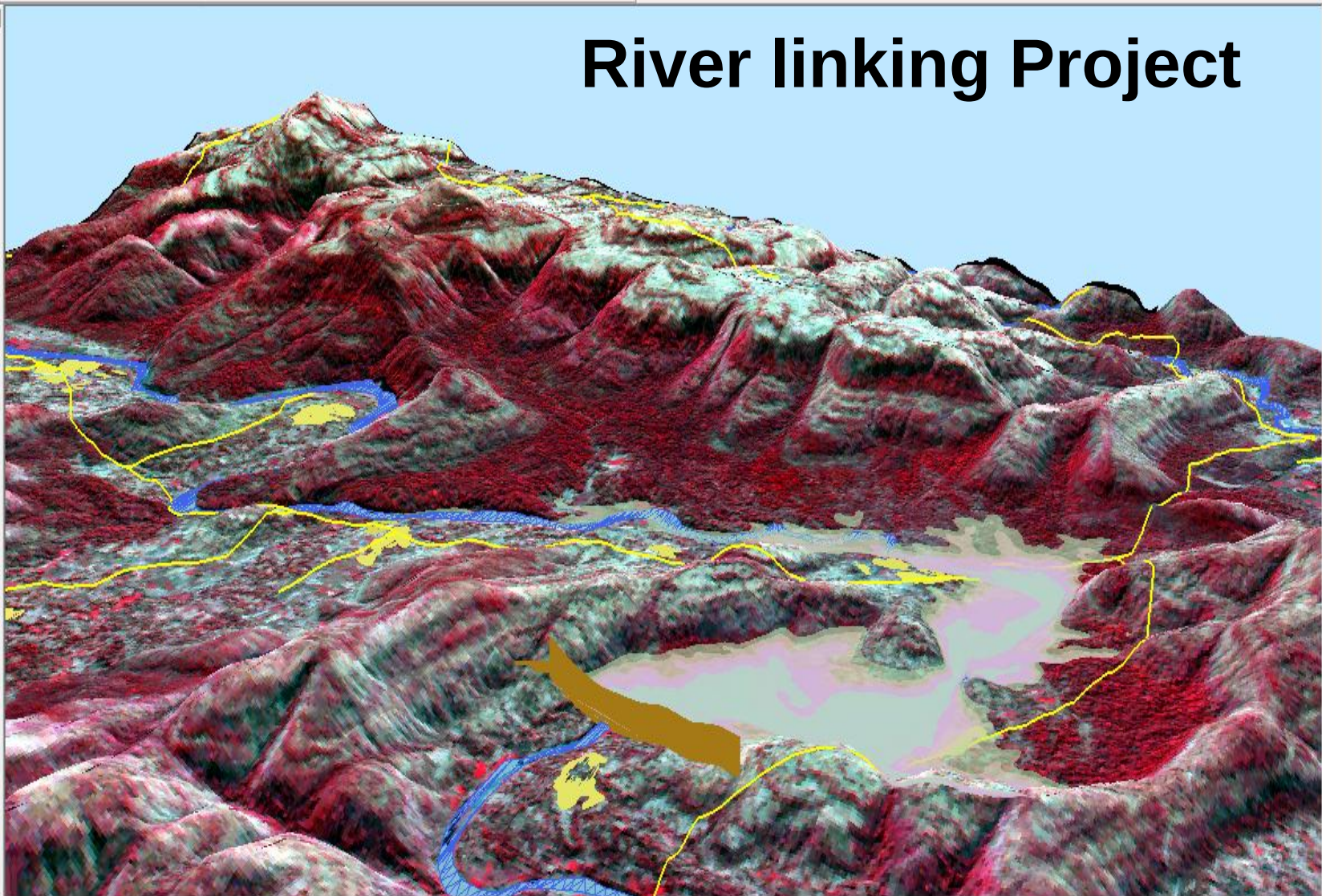
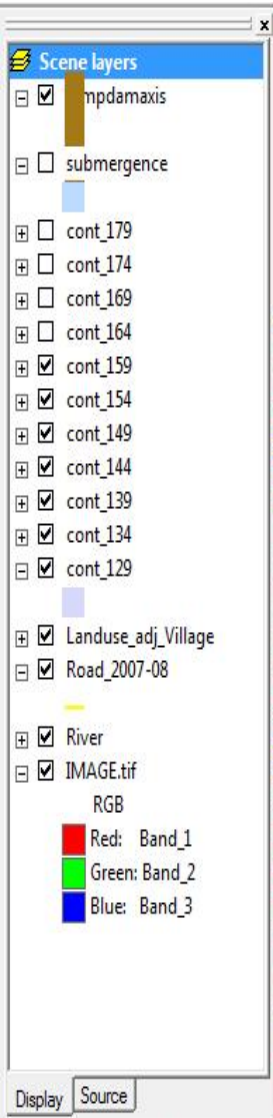
INDIAN REMOTE SENSING SATELLITE 3D IMAGE

River linking Project



INDIAN REMOTE SENSING SATELLITE 3D IMAGE

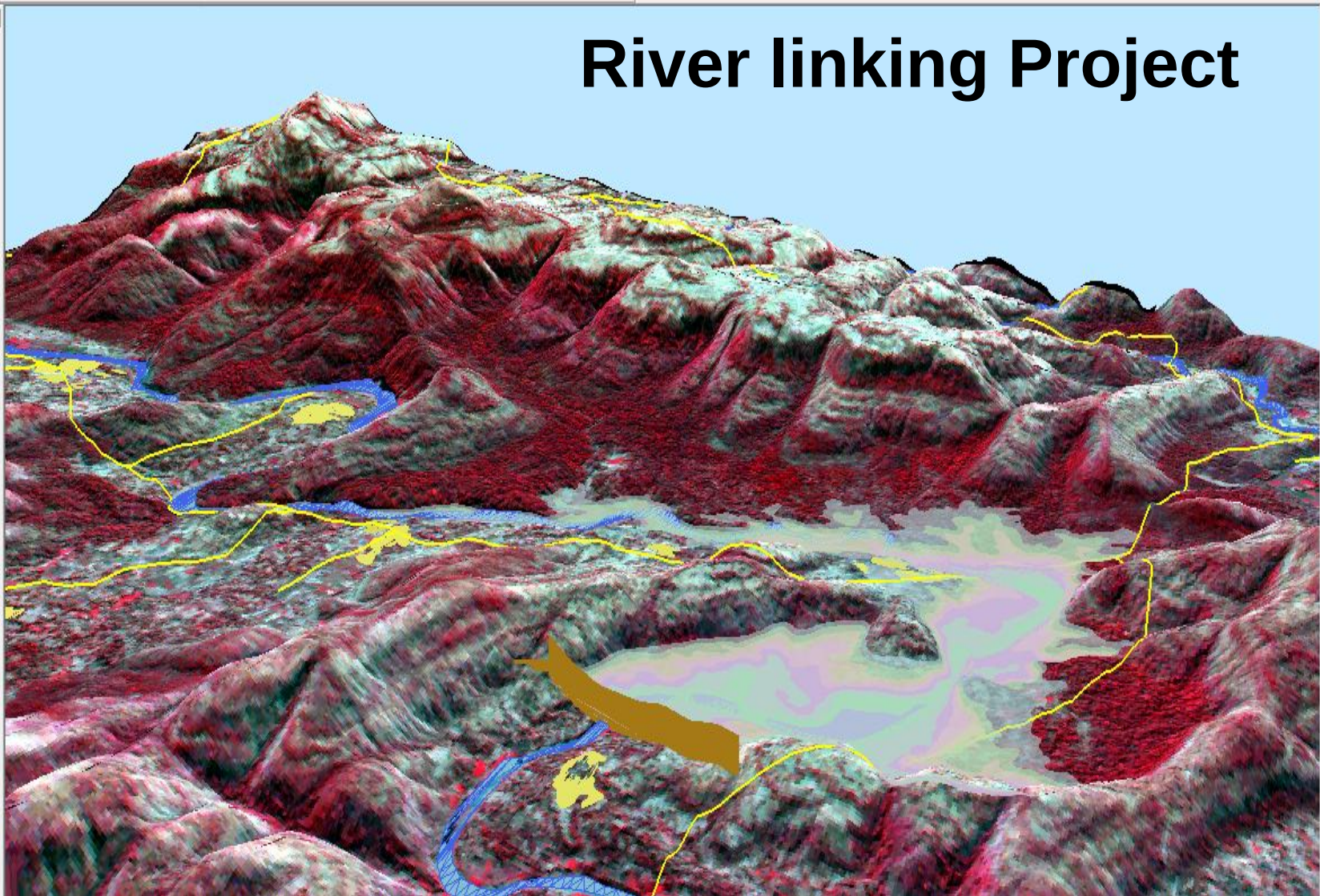
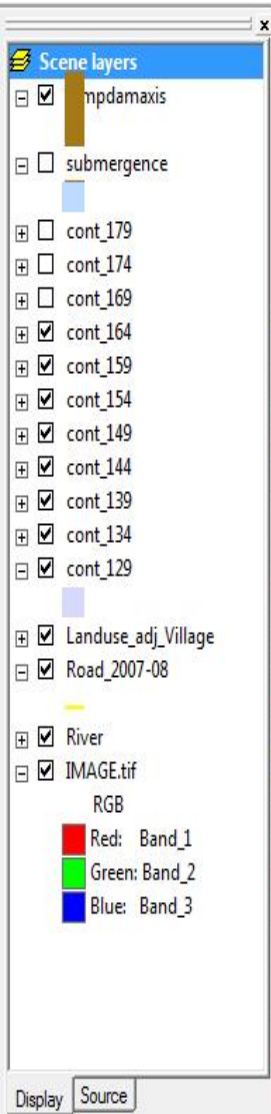
River linking Project



Changes interactively the layer transparency

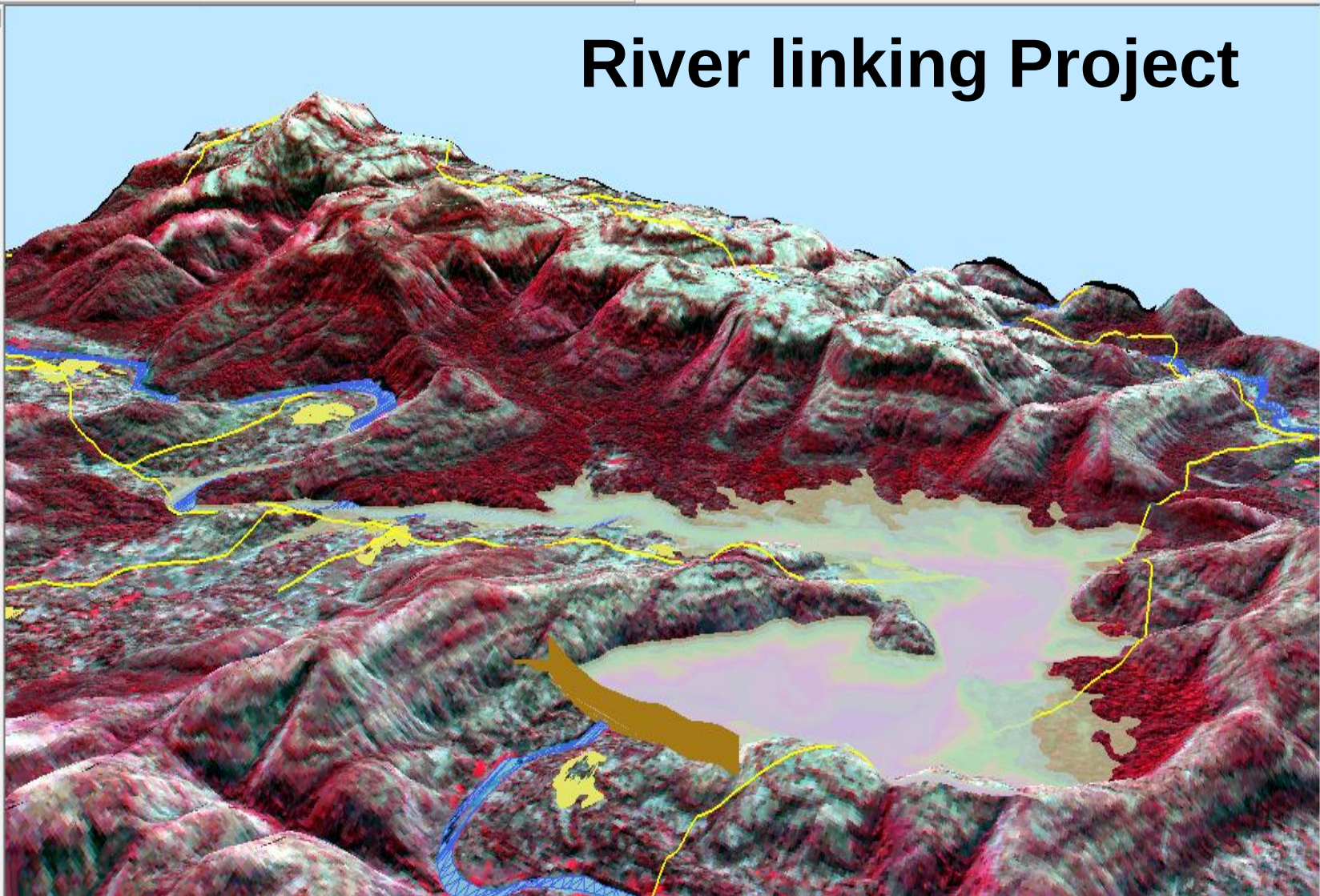
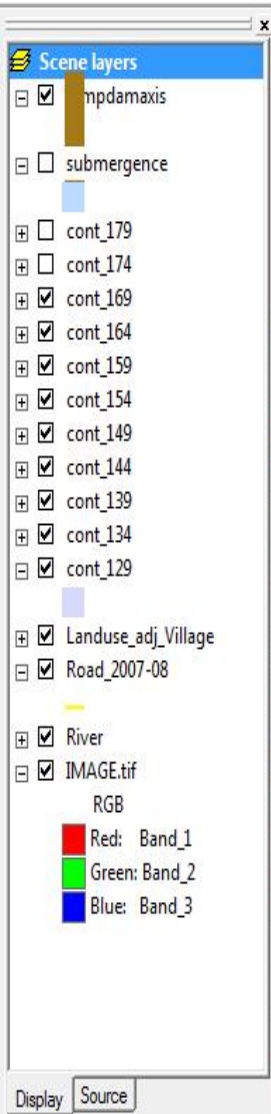
INDIAN REMOTE SENSING SATELLITE 3D IMAGE

River linking Project



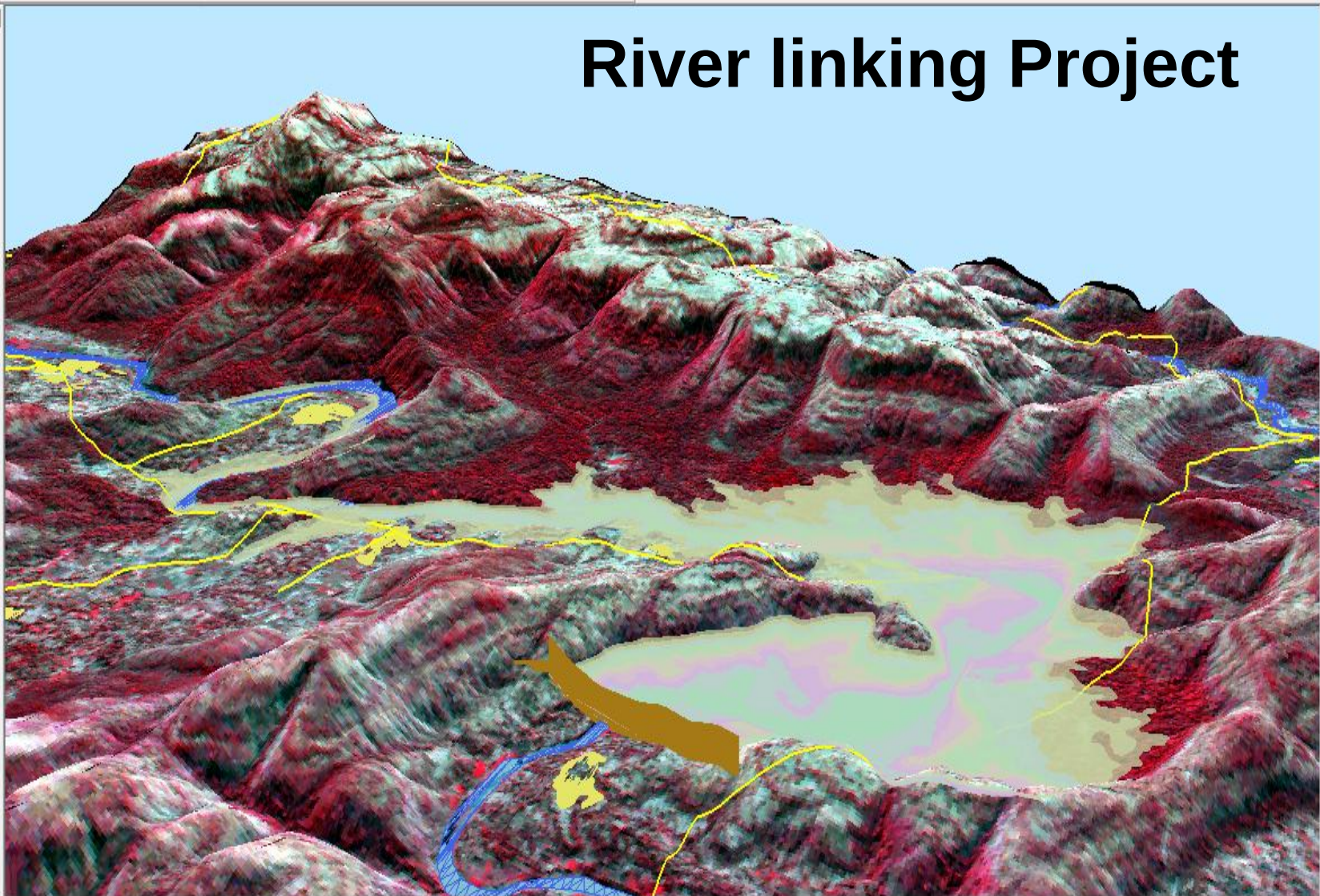
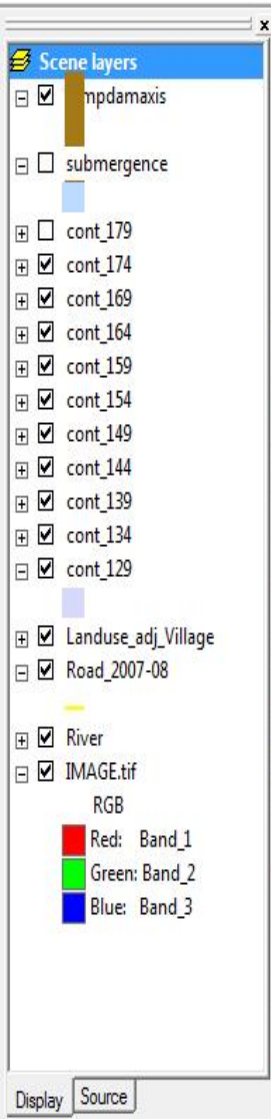
INDIAN REMOTE SENSING SATELLITE 3D IMAGE

River linking Project



INDIAN REMOTE SENSING SATELLITE 3D IMAGE

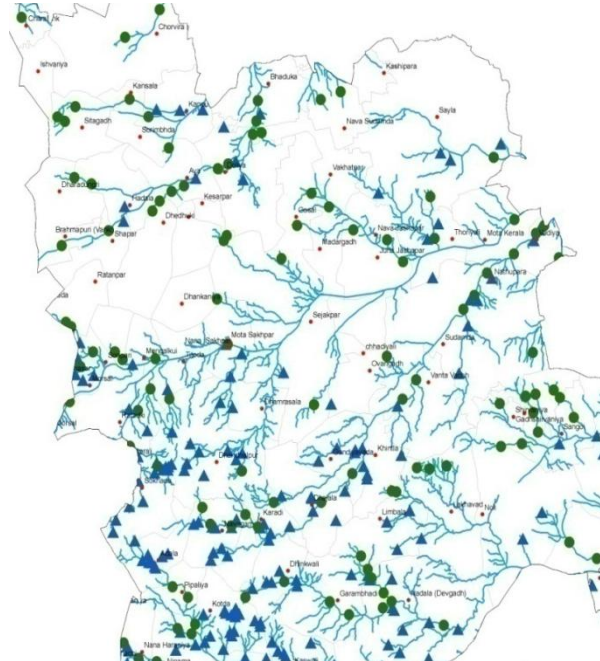
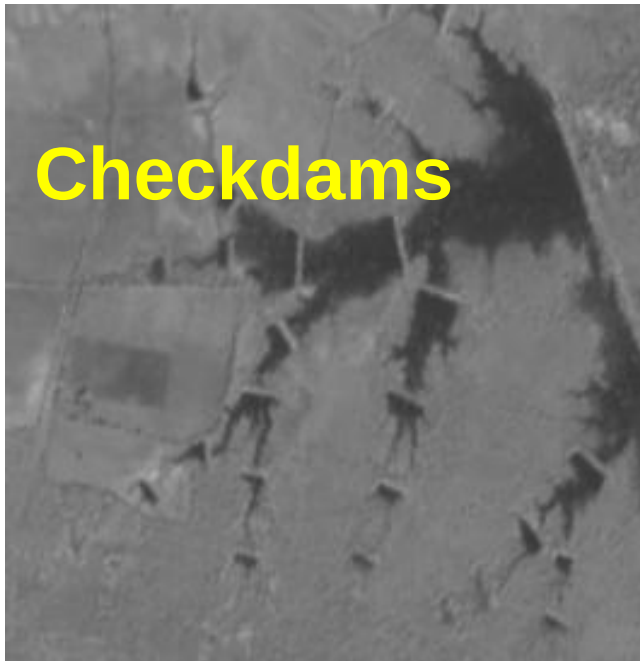
River linking Project



Applications of Geo-informatics in Agriculture

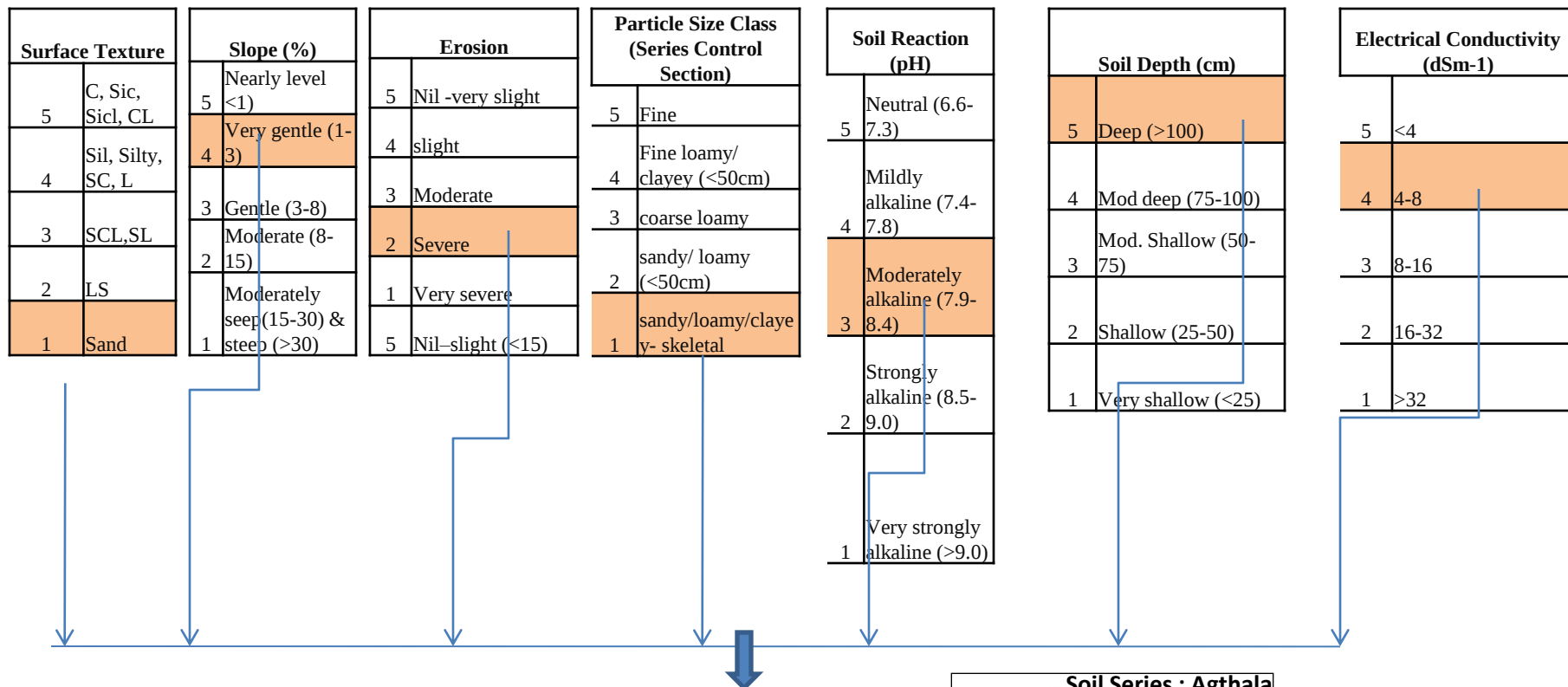
Water Harvesting Structures

Checkdams



GIS Layers

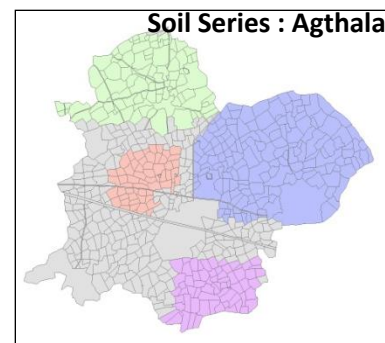
Purpose: Programme Monitoring, Impact Assessment and Research



Series Map unit

Soils of Aeolian Plain

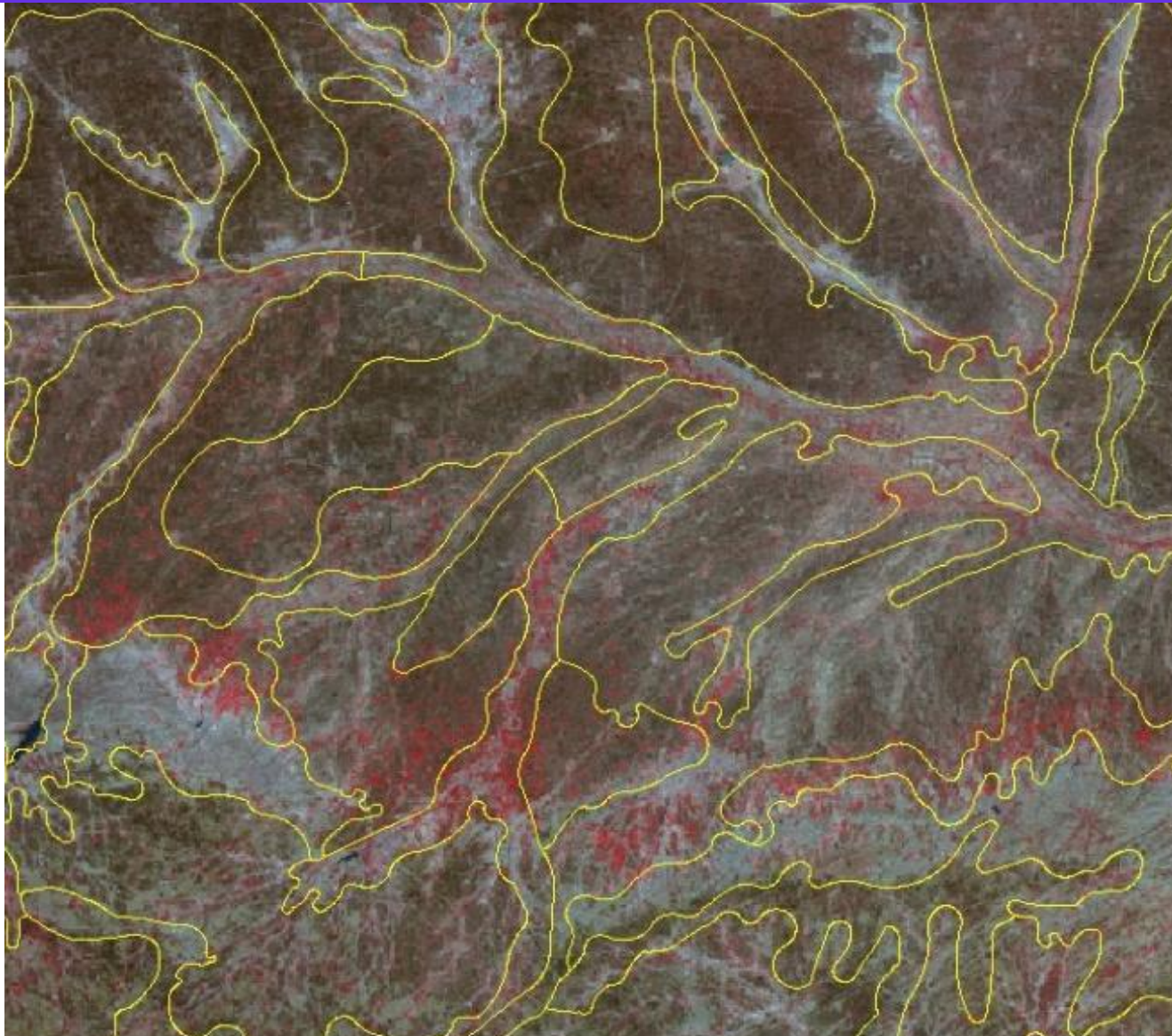
Agthala Agt-bB2



- Potato
- Wheat
- Mustard
- Permillet
- Groundnut

Potato	Wheat	Mustard	Permillet	Groundnut	Castor	Cropping Sequence Option 1	Cropping Sequence Option 2	Cropping Sequence Option 3
Suitable	Marginally suitable	Moderate suitable	Marginally suitable	Marginally suitable	Marginally suitable	P.millet-Potato- Pearlmillet	P.millet-mustard- Pearlmillet	groundnut-Potato- Pearlmillet

Efforts towards soil health card preparation : through support of Geo-informatics technology



Identification of location for soil samples collection

Efforts towards soil health card preparation : through support of Geo-informatics technology



Soil parameters

- 1) Drainage,
- 2) Slope
- 3) Depth
- 4) Texture
- 5) Salinity
- 6) Reaction

6 Taluka already completed

Identification of Location for Soil samples collection

In collaboration with NBSS&LUP

Applications of Geo-informatics in Agriculture

જમીન આરોગ્ય પત્રકની વિગતો

ખેડૂતની સામાન્ય માહિતી

	સુચિપત્ર નંબર	SHC01208735
	સુચિપત્ર વર્ષ	2009-2010
1. ગામ	ગાવડજી	તાલુકો અમરેલી
જીલ્લો	અમરેલી	રાજ્ય ગુજરાત
2. ખેડૂતનું નામ	વાઘેલા કુલબાઈબેન રાધવભાઈ	
3. લેવાનો પાક	* ઉનાળું મગફળી	
4. ખાતા નંબર	-	
5. સર્વે નંબર	18	
6. સર્વે નંબરનું ક્ષેત્રફળ (હેક્ટર)	00 : 99 : 15	
7. જમીનનો પ્રકાર	મધ્યમ કાળી જમીન	

(* પાકની માહિતી મેળવવા માટેની કડી)

ગામની જમીનની ચકાસણી આધારિત ફળદ્રુપતાનો વર્ગ (ગણતરીની રીત)

ફળદ્રુપતાનો વર્ગ	નાઈટ્રોજન	ફોસ્ફરસ	પોટાશ
ઓછા		✓	
મધ્યમ	✓		
વધારે			✓

Soil Health Card - District: Amreli
Taluka : Amreli Village : Gavdaka
Survey No : 18

વ્યક્તિગત જમીનની ચકાસણી વિગત

ક્રમ	વિગત	પરિણામ	પરિણામની સમજ
1.	પી.એચ. આંક (જમીનની પ્રતિક્રિયા)	7.80	ભાસ્મિક
2.	ઈ. સી. (કુલ દ્રાવ્ય ક્ષારો) (કેસીસાયમન/મીટર)	0.56	સામાન્ય
3.	સેન્દ્રિય કાર્બન (ટકા)	0.78	મધ્યમ
4.	લઘ્ય ફોસ્ફરસ(કિ.ગ્રા./હેક્ટર)	45.60	મધ્યમ
5.	લઘ્ય પોટાશ (કિ.ગ્રા./હેક્ટર)	345.84	પૂરતો

Micro level Planning

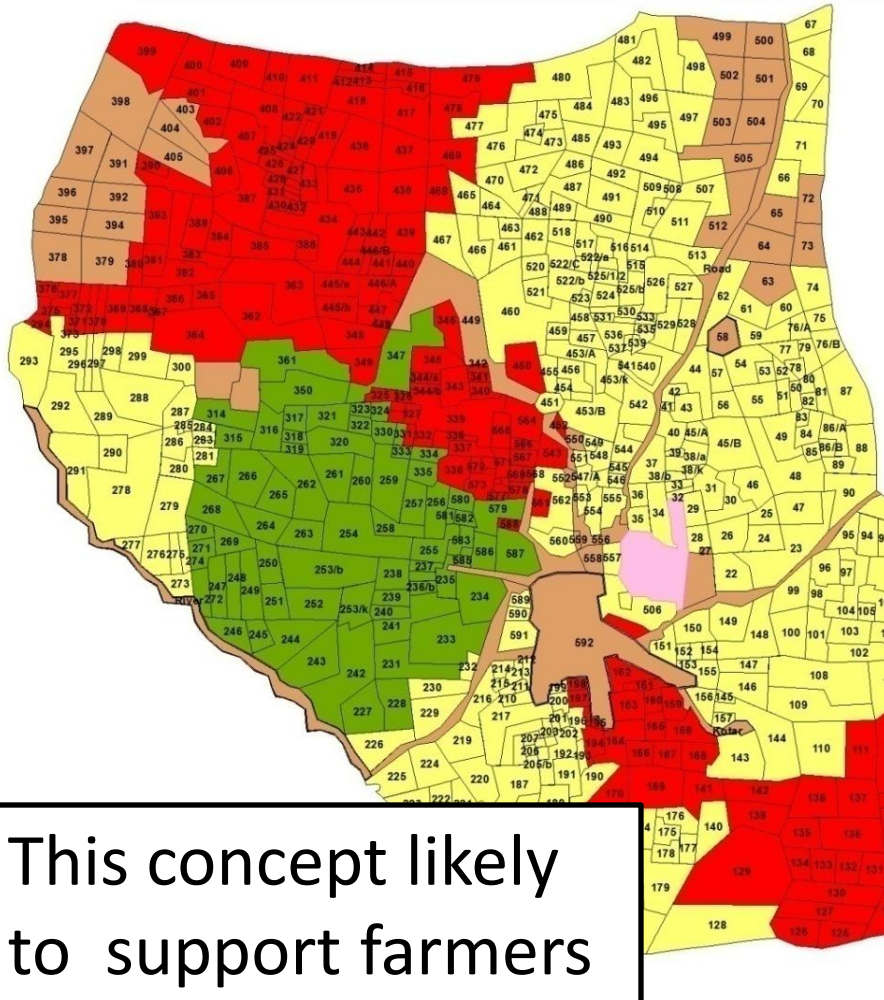
Applications of Geo-informatics in Agriculture

Survey Number wise Soil Fertility Map

જસત

Zn

Calculation of
Crop wise fertilizer
requirement



	A	B	C	D	E	F	G	H	I	J	K
1	No	Name of Village	Taluka	District	Village total Area (ha)	Sulphur					
2						Low	Medium	High	Total requirement kg/ha		
3	1										
4											
5	1	Pithadiya	Bagsara	Amreli	616	Area	0	197	419		616
6						Requirement	0	1970	0		1970
7	2	Vadhela	Barwala	Ahemadabad	1867	Area	0	1033	834		1867
8						Requirement	0	10330	0		10330
9	3	Rojid	Barwala	Ahemadabad	2333	Area	0	998	1335		2333
10						Requirement	0	9980	0		9970

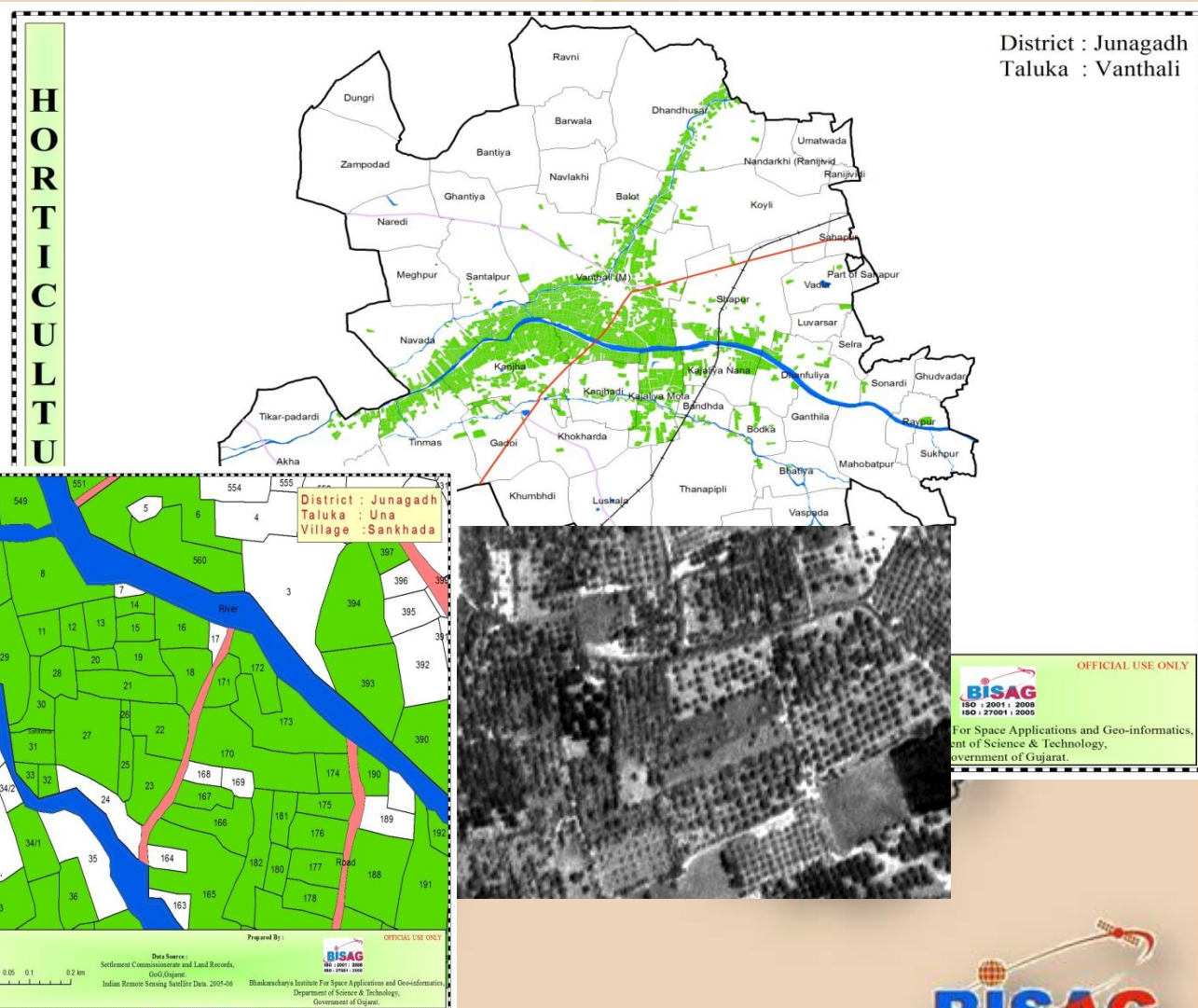
જસત તત્વ માટે ભલામણ

- ઓછું : ઝીક સલ્ફેટ (૨૧% ઝીક) ખાતર ૨૫ કિગ્રા પ્રતિ હેકટર જમીનમાં આપવું
- મધ્યમ : ઝીક સલ્ફેટ (૨૧% ઝીક) ખાતર ૮ કિગ્રા પ્રતિ હેકટર જમીનમાં આપવું
- પુરતુ : જસત તત્વ પુરતા પ્રમાણમાં છે.

This concept likely
to support farmers
call centre

Applications of Geo-informatics in Agriculture

Horticulture Atlas of Gujarat State



Survey no wise horticulture map

Applications of Geo-informatics in Agriculture

Allocation of Horticulture scheme beneficiaries to farmers through WEB GIS

Report - Microsoft Internet Explorer

Select Year: 2011

Select Yojana: ગુજરાતમાં સંકલીત બાગાયત વિકાસ

Select Ghatak: ડેવા

Select Sub Ghatak: ---Select---

Select Sub Ghatak: ---Select---

Submit ViewMap Cancel Export To Excel Print

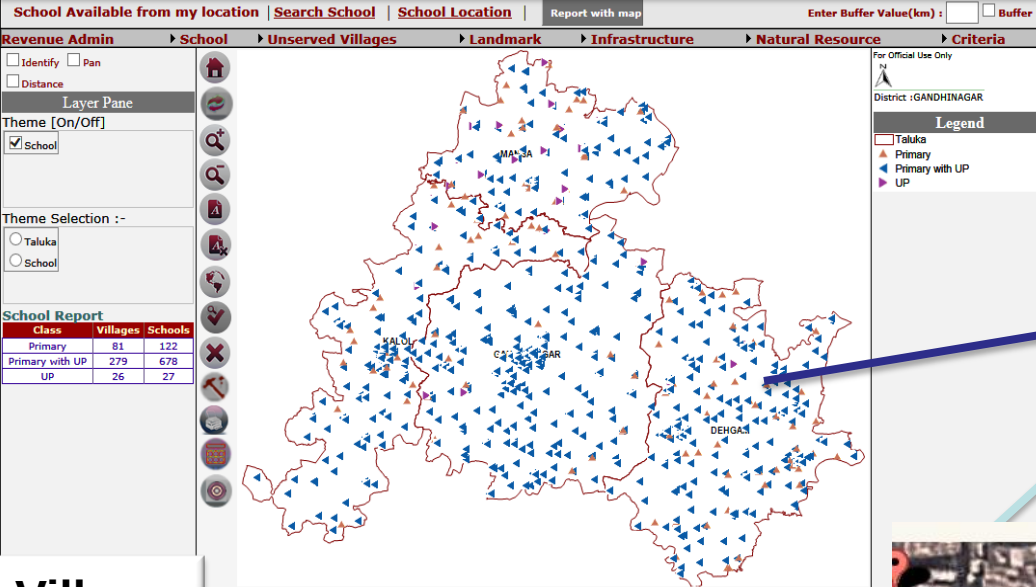
Village	Yojana Name	Ghatak Name	FarmerName	Caste	Sex	Sahay	CropName	SNo
A Dhava	ગુજરાતમાં સંકલીત બાગાયત વિકાસ કાર્યક્રમની	ડેવા	KANTILAL BAVANJI KANERIYA	અન્ય	પુરુષ	7275.00		252
A Dhava	ગુજરાતમાં સંકલીત બાગાયત વિકાસ કાર્યક્રમની	ડેવા	KARASHAN GOVIND DALSANIYA	અન્ય	પુરુષ	3750.00		84

Provides list of beneficiary for banana cultivation for Junagadh district and Dhava village at survey no level.

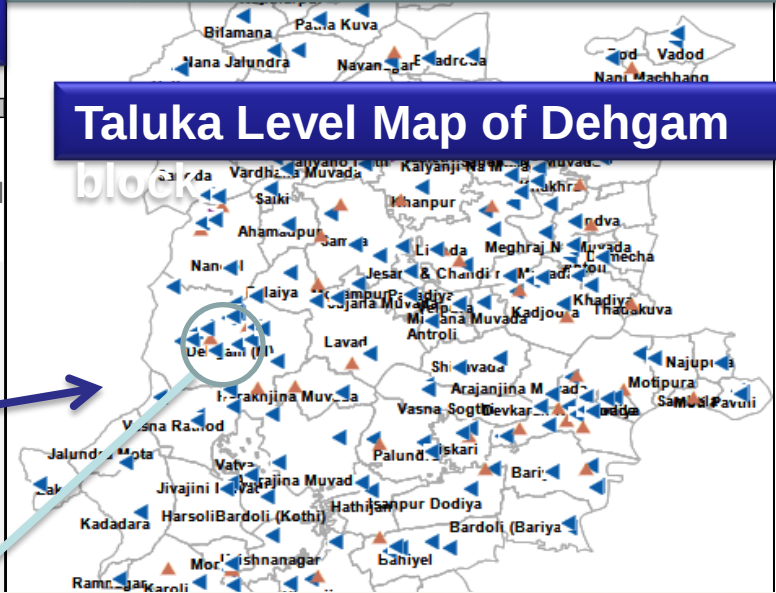
Ensuring Access and Quality of elementary education

Different level Map Layer

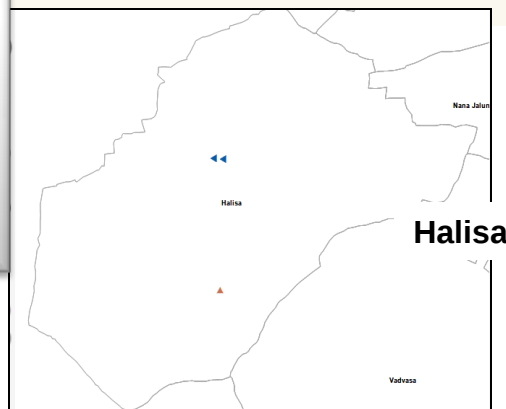
District Level Map of Gandhinagar



Taluka Level Map of Dehgam



Village Level Map of Halisa village



through innovative use of GIS Technology in eGovernance

Exploring school specific information

Browser: <http://www.ssagujarat.org/gismap/Default.aspx> | Aadhaar Students Registration ... | eTaal | Electronic Transaction ... | School Mapping System

Year: 2012-2013 | District: GANDHINAGAR | Taluka: DEHGAM | Cluster: ---Select--- | Village: ---Select---

School Available from my location | Search School | School Location | Report with map | Enter Buffer Value(km): ☐ Buffer

Revenue Admin | School | Unserved Villages | Landmark | Infrastructure | Natural Resource | Criteria

Identify | Pan | Distance | Layer Pane | Theme [On/Off] | ☒ School

Map showing locations: Chekhlap, Ottam, Vasana Chauhan, Babra, Uda, Baramana, Pania Kuva, Nana Jalundra, Nayanagar, Eadreja, Vadod, Nani Machhang, Moti Machhang, Mirzap, Sagdarpur, Dhaana, Badli, An, Halisa, Vadvas, Halivano, Leth, Jamsul, Sahab, N, Muvad.

For Official Use Only
District : GANDHINAGAR
Taluka : DEHGAM
Village : ---Select---

Legend
☐ Village
☒ Primary
☐ Primary with UP
☐ UP

Primary School Report - Internet Explorer
<http://www.ssagujarat.org/gismap/PrimaryReportNew.aspx>

Primary School Report
Enrollment ☒ Facility

Total School Count : 3 | Convert to Excel | Print | Cancel

SchoolCode	District	Taluka	Cluster	Village	School Name	School Type	Year	Building Status	Management Description	Category Description	Class1 Boys	Class1 Girls	Class2 Boys	Class2 Girls	Class3 Boys	Class3 Girls	Class4 Boys	Class4 Girls	Class5 Boys	Class5 Girls	Class6 Boys	Class6 Girls	Class7 Boys	Class7 Girls	Class8 Boys	Class8 Girls
060106101	GANDHINAGAR	DEHGAM	HALISA	HALISA	HALISA PRI. SCHOOL	3	1889	Government	Local body	Primary with Upper Primary	46	44	46	58	26	35	34	28	40	40	15	25	20	22	0	0
060105001	GANDHINAGAR	DEHGAM	HALISA	DOLATPURA	DOLATPURA PRI. SCHOOL	3	1997	Government	Local body	Primary	5	2	7	2	5	5	3	4	4	5	0	0	0	0	0	0
060106102	GANDHINAGAR	DEHGAM	HALISA	HALISA	SWASTIK HIGH. SCHOOL	3	1964	Private	Pvt. Unaided	Primary with Upper Primary	0	0	0	0	0	0	0	13	5	25	7	32	11	0	0	

Enrollment ☒ Facility

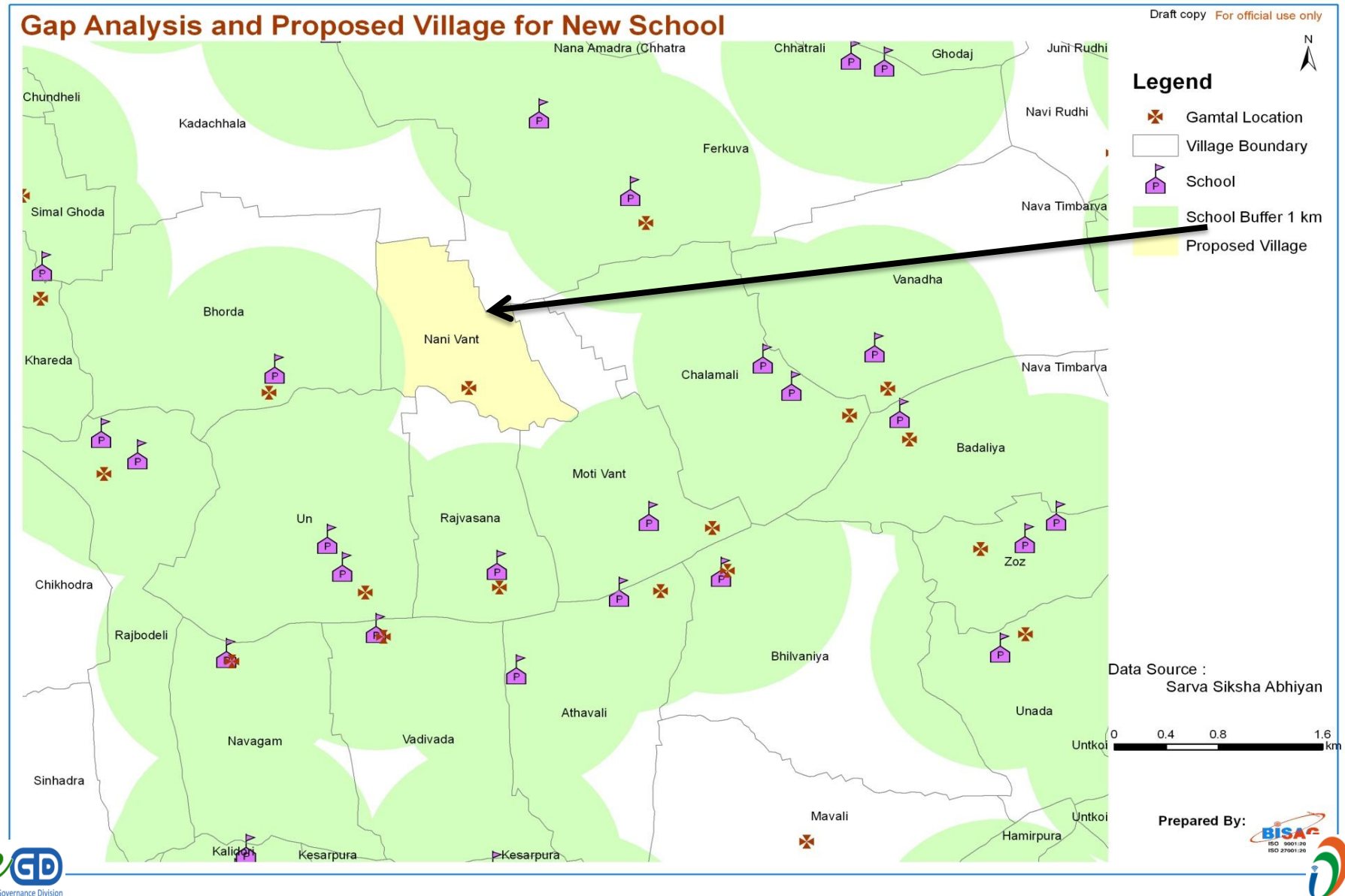
Total School Count : 3 | Convert to Excel | Print | Cancel

School Name	School Type	Year	Building Status	Management Description	Category Description	Common Toilet	Girls Toilet	Electricity	BoundaryWall	PlayGround	BlackBoard	Water	Computer	Kitshed	Ramp	NPEGEL	KGBV_MODEL	ADEPTS	PPSEC	FURNSTU	FURNTCH	CRCROOM
HALISA PRI. SCHOOL	3	1889	Government	Local body	Primary with Upper Primary	0	1	1	Pucca	1	15	Tap Water	0	0	1	2	2	9	2	3	2	2
DOLATPURA PRI. SCHOOL	3	1997	Government	Local body	Primary	0	1	1	Pucca	1	6	Tap Water	0	0	1	2	4	2	2	3	2	2
SWASTIK HIGH.	3	1964	Private	Pvt. Unaided	Primary with Upper Primary	0	1	1	Pucca but Broken	1	3	Tap Water	3	0	2	2	4	2	2	3	2	-

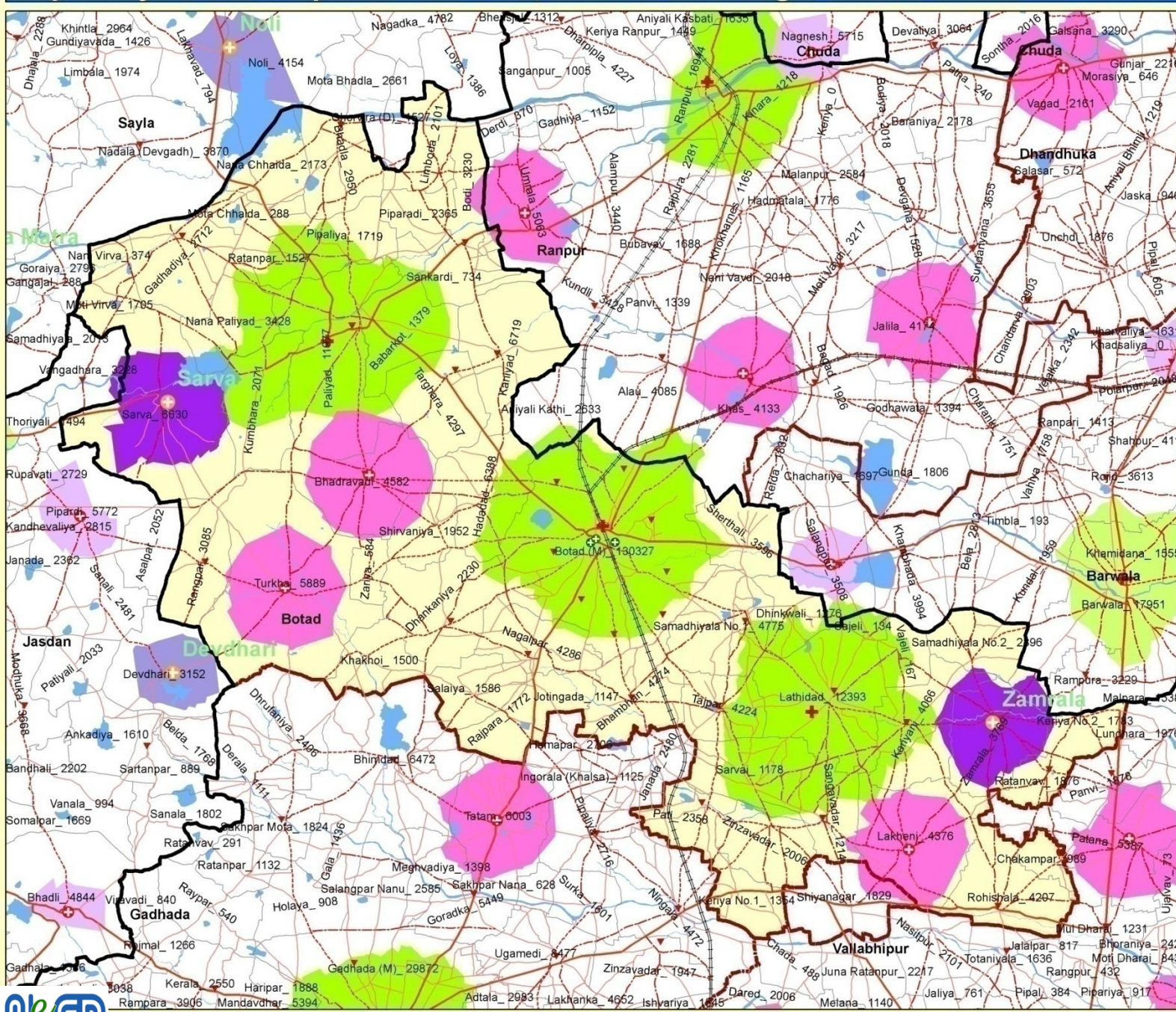
NeGD National e-Governance Division

Digital India Power To Empower

identification



Gap Analysis and Proposed New PHC, District: Bhavnagar Taluka: Botad



Draft C

(For official use only)

Selected Parameters for Selection of Industrial site

Administrative boundary	Area of Interest	Infrastructure	Industries	Area to be Avoided
District Taluka Village Settlement	Investment Region Landbank Along the road SEZ GIDC Estates Existing Industres Landbank with CRZ ALL		CETP Mining Site Industrial Zoning Major Industries ALL	Settlement Double Cropping CPCB Guideline Forest Horticulture Coastal Regulation Zone National Park and Sanctuary Thor Nalsrovar 5 km buffer Thor Nalsrovar 10 km buffer Critical Taluka
Investment Criteria		Infrastructure		
Industries List Land Criteria Others		Road Rail Ports Airports Power Line Power Substation Major Town Gas Pipeline ALL		
Calamities	Water Resources			Amenities
Earthquake Flood Cyclone Tsunami	River/Waterbody Canal Command Area Checkdam Ground Water Prospects			School ITI Health Drinking Water Police Station Bank ALL
Cadastral Map	Land Resources			
Along The Road Investment Region Land Bank	Soil Wasteland Governement Wasteland			

Selected Parameters for Selection of Industrial site

District **AHMEDABAD** Taluka **VIRAMGAM** Village Go Back Suitable Industry Home View Photos

☒ **Industrial Zone**

- Z1W/h
- Z1W/l
- Z1W/m
- Z2W/h
- Z2W/l
- Z2W/m
- Z3W/h
- Z3W/l
- Z3W/m
- Z4W/h
- Z4W/l
- Z4W/m

☒ **Revenue Plots**

☒ **RAIL**

☐ **TYPE OF ROADS**

- Expressway
- National Highway
- State Highway
- Ring Road
- Major District Road
- Other

☒ **VIRAMGAM'S VILLAGE**

☒ **AHMEDABAD'S TALUKA**

☒ **Investment Region**

Active Theme

INDUSTRIAL ZONE

Investor Support System

Suitable Industry

Z4Wm

- Low Air Pollution Sensitivity & Medium Water Pollution Sensitivity
- Type of Industries
- Thermal Power Plants | Coal or coke based > 200/210 MW
- Nitric Acid
- Sulphuric Acid
- (Synthetic; Semi Synthetic)
- Industrial carbon including electrodes and graphite blocks, activated carbon, carbon black etc
- Incineration plant
- Power generating plants (excluding DG Sets)
- Chlorine, fluorine, bromine, iodine and their compounds
- Hydrocyanic acid and its derivatives
- Including all process involving the use of Asbestos
- Dry coal processing/Mineral processing industries like ore sintering, palletization etc
- Phosphate rock processing plants
- Coke making, coal liquefaction, coal tar distillation or fuel gas making
- Industry or process involving foundry operations
- Ceramic/refractoriness
- Hot mix plants
- Mining and ore-beneficiation

Selected Parameters for Selection of Industrial site

District **AHMEDABAD**

☒ Revenue Plots

☒ RAIL

☐ TYPE OF ROADS

Expressway
National Highway
State Highway
Ring Road
Major District Road
Other

☒ VIRAMGAM'S VILLAGE

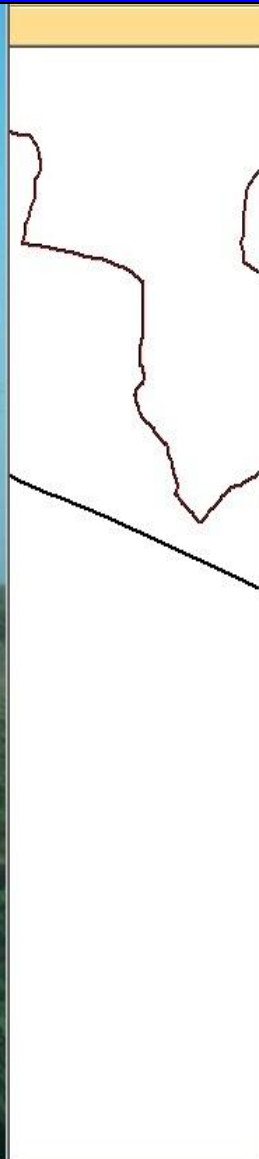
☒ AHMEDABAD'S TALUKA

☒ Investment Region

☒ DISTRICT

Active Theme

INVESTMENT REGION



Next

Previous

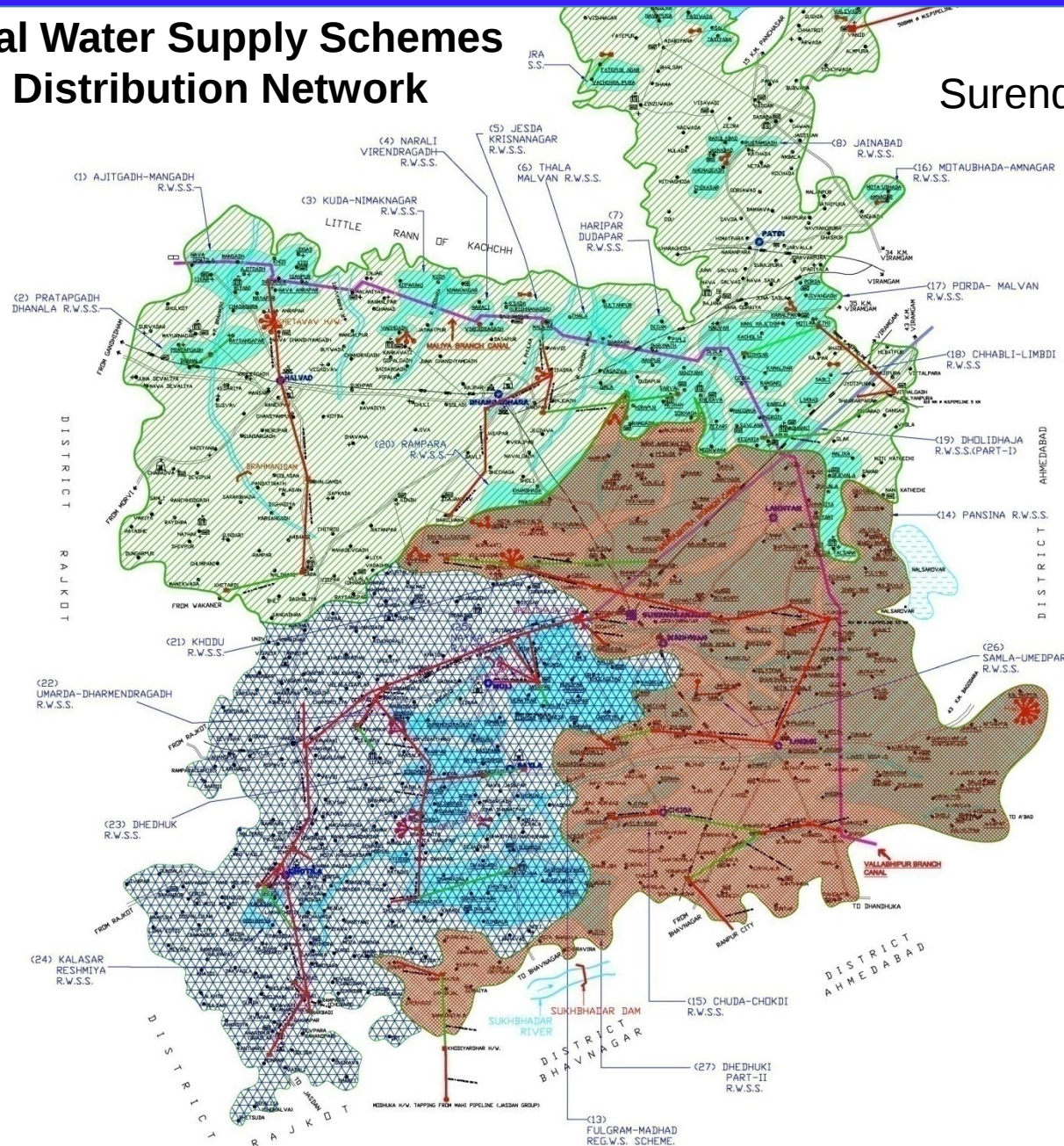
Cancel

20/05/2010

Gujarat GIS: Water Supply Network and DSS

Regional Water Supply Schemes and Distribution Network

Surendranagar District



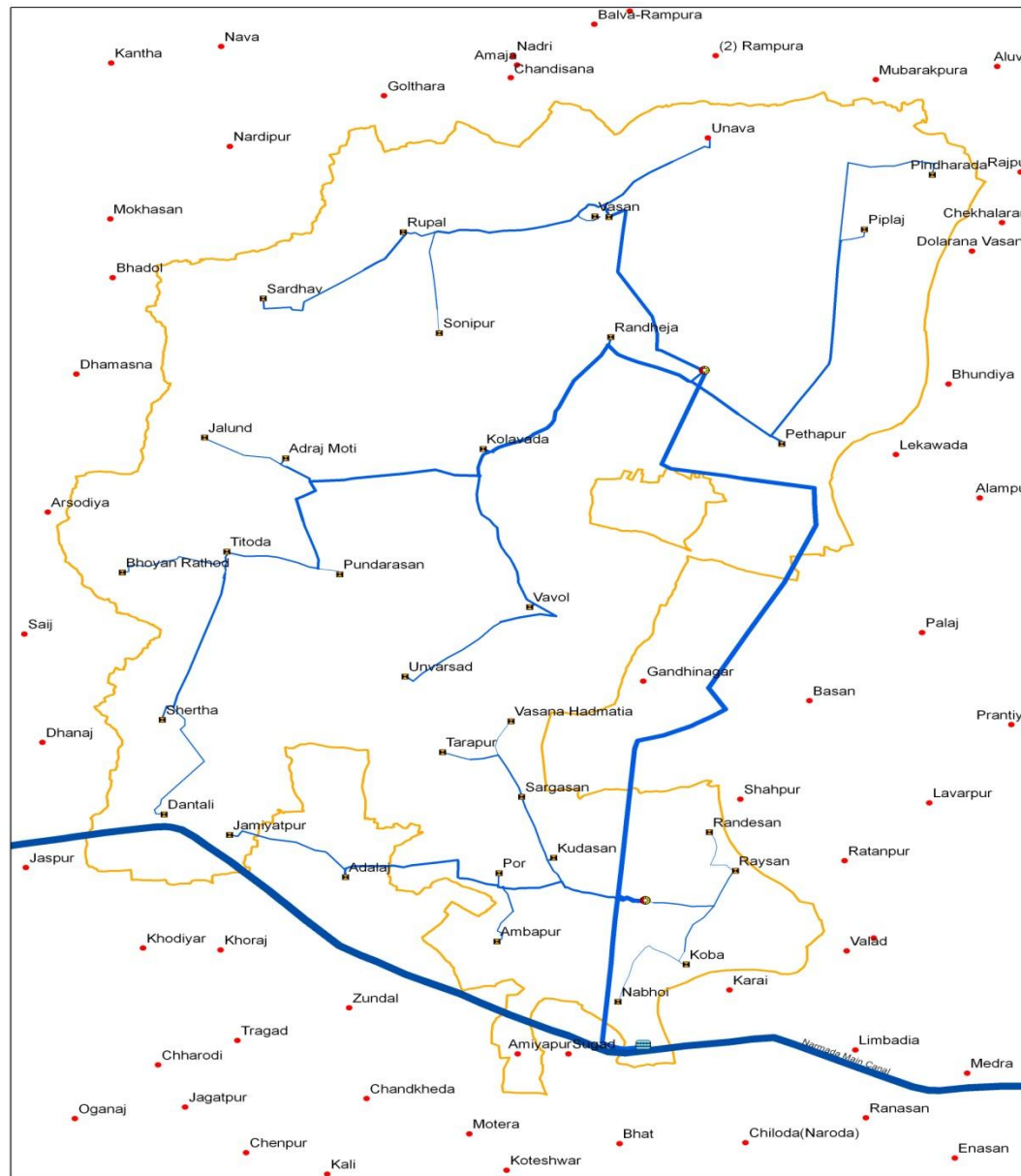
LEGEND :

SAURASHTRA BRANCH CANAL	
MALIYA BRANCH CANAL	
VALLABHIPUR BRANCH CANAL	
WELL (SOURCE)	
T.W/CANAL OFFTAKE (SOURCE)	
MAIN H.W.&TREATMENT PLANT	
SUB HEAD WORK	
RISEING MAIN	
DISTRIBUTION PIPE LINE	
EXISTING REG.W.S.S.	
SUJALAM SUPHALAM S-1 (NCD-4)	
SUJALAM SUPHALAM S-2 & S-3	
UNDER PROGRESS PHASE-II	
GUJARAT WATER SUPPLY & SEWERAGE BOARD., GANDHINAGAR	

REGIONAL WATER SUPPLY SCHEME OF DIST. SURENDRANAGAR

THE CHIEF ENGINEER ZONE : 2 AHMEDABAD.	
THE SUPRINTENDING ENGINEER P.H.S. CIRCLE AHMEDABAD.	
THE EXECUTIVE ENGINEER P.H.W. DIVISION SURENDRANAGAR	

Gujarat GIS: Water Supply Network and DSS



Legend

- Sub Headworks
- Headworks
- Main Source
- Settlement
- Narmada Main Canal

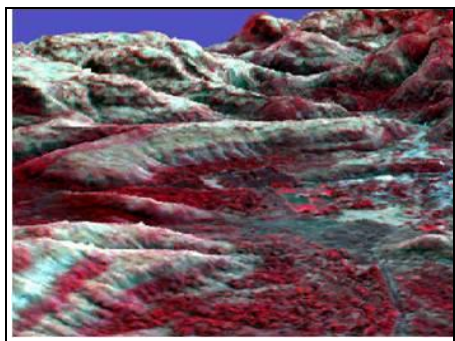
Pipeline Diameter(mm)

- 1850
- 610
- 400
- 350
- 300
- 250
- 200
- 160
- 140
- 110
- 90

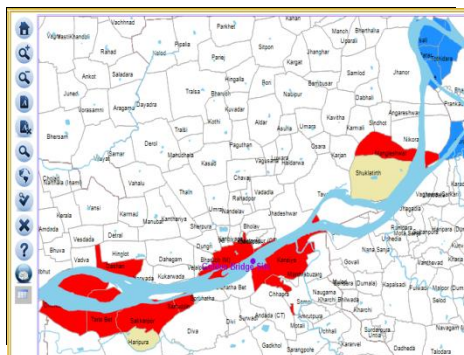
- Water Supply Sch

Supports Planning and Management

Geo-spatial database: Conceptualization & creation



3-D image

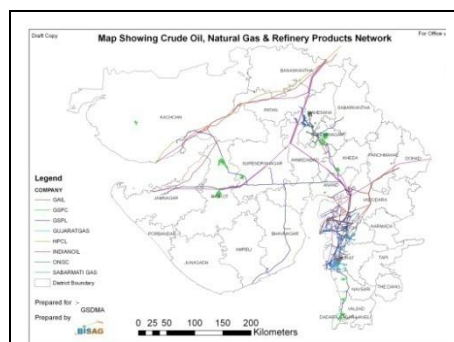


Flood Management

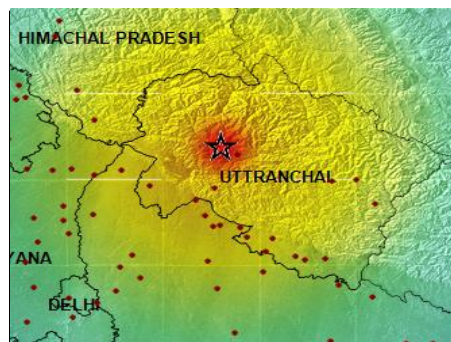


SDRN

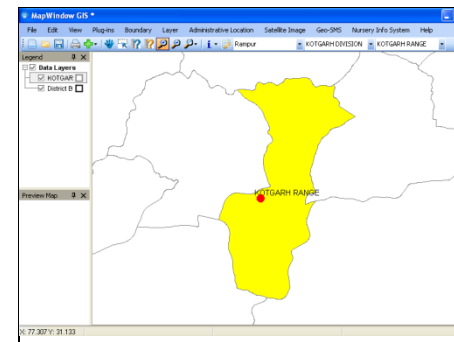
Satellite Image Geo-referenced Through GPS measurements



Oil & Gas Pipeline

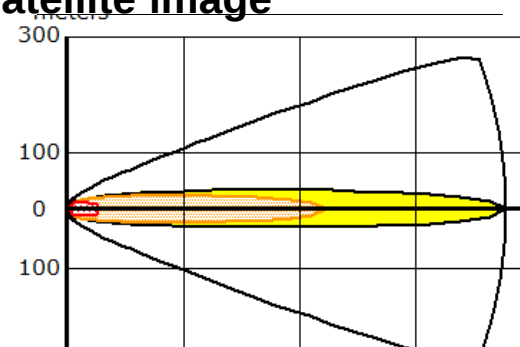
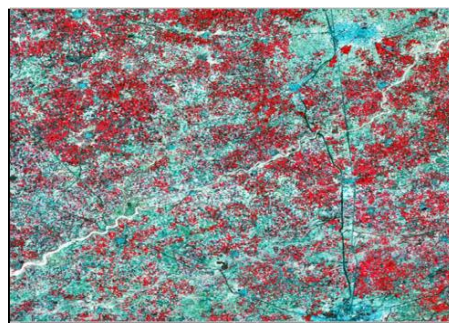
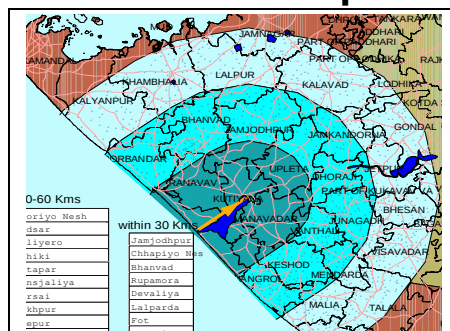


Earth Quake



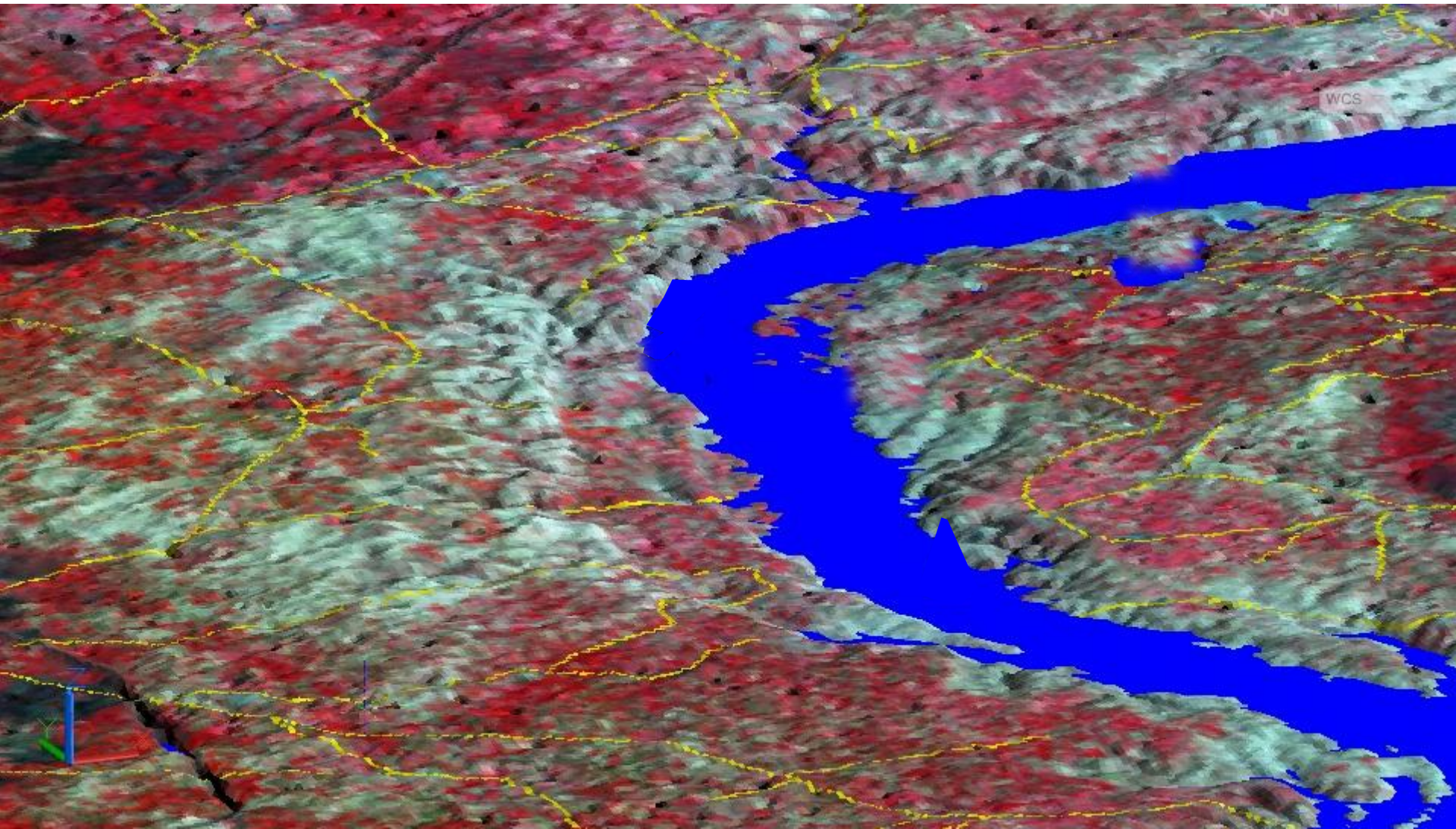
Forest Fire

Departmental data sets superimposed on satellite image

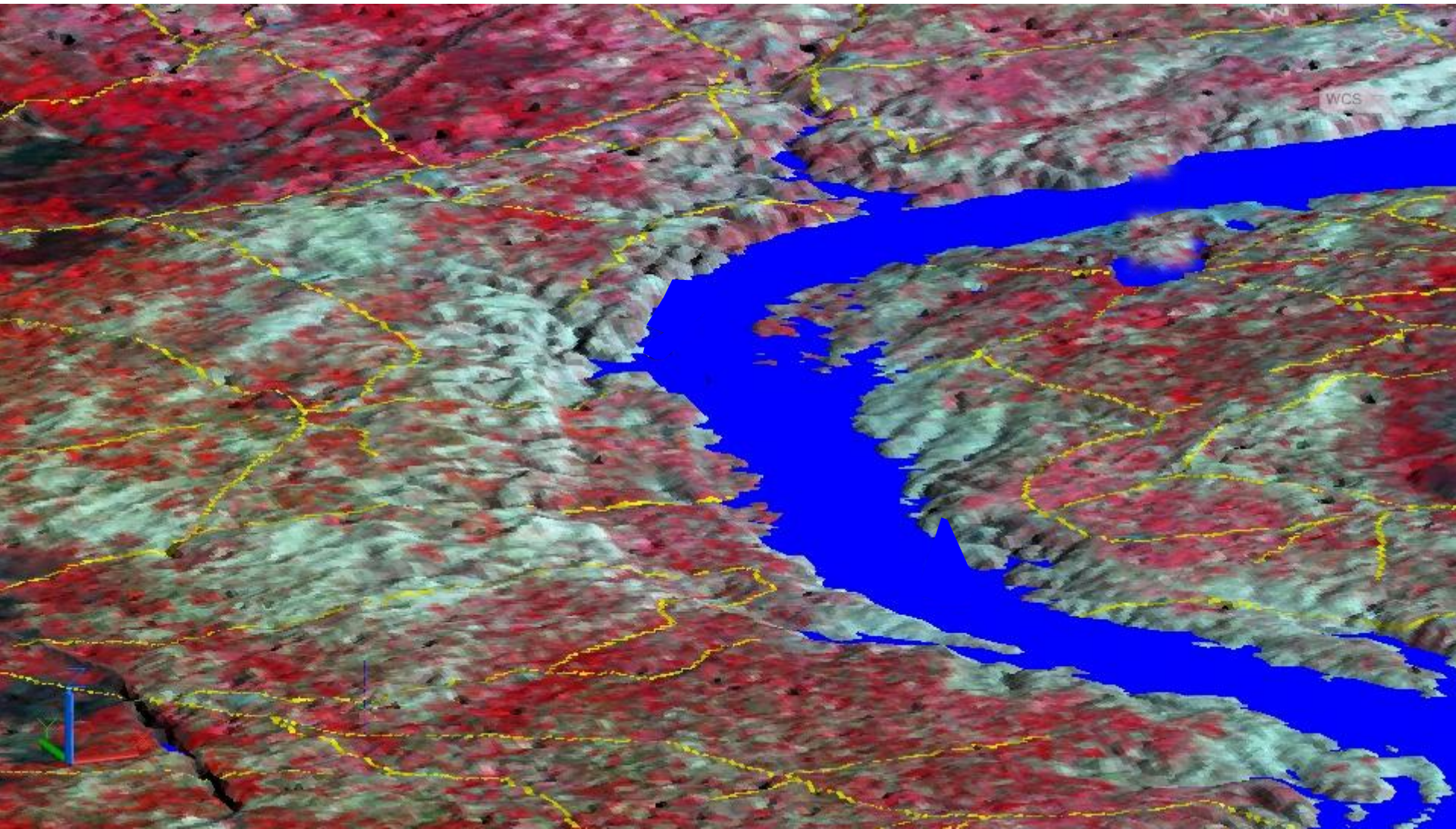


Attribute data linked to corresponding Feature/Location/Unit

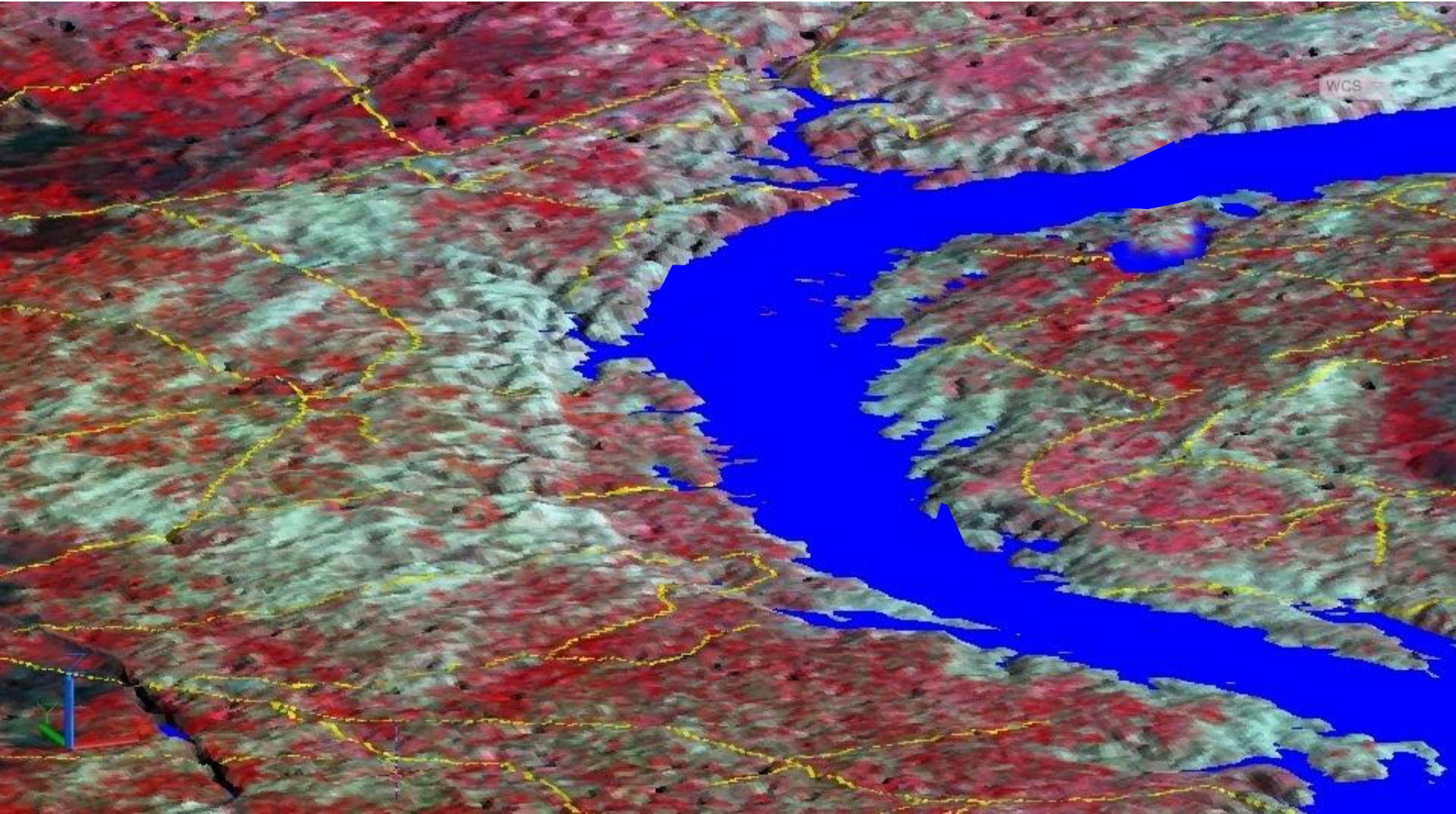
Floods Visualization using 3D Satellite images



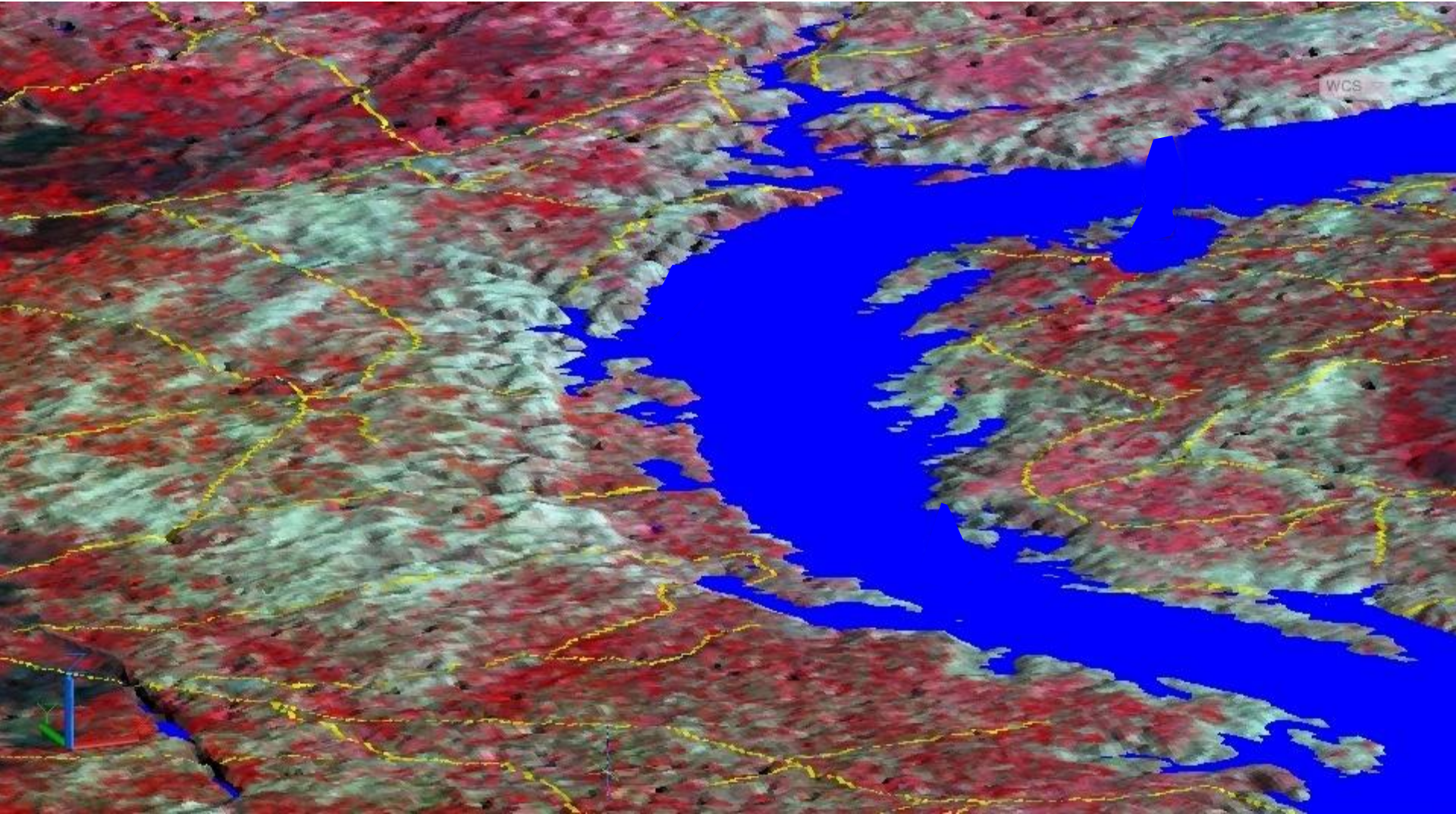
Floods Visualization using 3D Satellite images



Floods Visualization using 3D Satellite images



Floods Visualization using 3D Satellite images



Chemical Database

uch Chemical Disaster Management System

Bharuch Chemical Industrial Disaster Management Application



View

Insert

Search By Company:

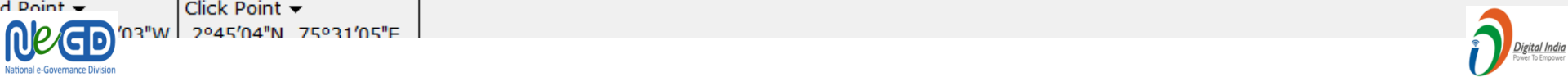
JL LIMITED-AROMATICS DIVISION

Address :

297,GIDC,Industrial Estate,Ankleshwar

		ID1	Chemical	Lat	Longitude	Tank_Type	Tank_Diameter_Length_in_f	State_of_the_Cherr	Chemical_Stored_a	Tank
►	Edit	464	Toluene	21.6268	73.022198	Vertical	52 cm Diameter	Liquid	Ambient	atm
	Edit	465	Sulphur Dioxide	21.6268	73.022198	Horizontal	53 cm Diameter	Liquid	Ambient	3 – 6 k
	Edit	466	Sulphur Trioxide	21.6268	73.022198	Horizontal	54 cm Diameter	Liquid	32-42 °C	atm

EXPLOT



Toxic Threat zone on Google maps



Data SIO, NOAA, U.S. Navy, NGA, GEBCO
Image © 2014 DigitalGlobe

Thank You

GIS Applications : National Scenario

Technology	Database	Application Provider
Availability	Availability	Organizations
• Commercial	• Departmental data sets	• Central Govt: NNRMS/NRSC, NRDMS, NIC, NCoG, SOI, NSDI, NATMO, Departments
• Open source	• Satellite data: (Operational, Open)	• State Govt: State level RS & GIS Centres, Departments
• In-house Developed	• Attribute Data	• Academic & Research Institutes
• Capacity	• Derived Parameters (Models available)	• Industry

Challenge : Institutionalisation

GIS Applications : Institutionalisation Model

