

*GramyaVikas*ⁱ

A Distributed Collaboration Model
for Rural Development Planning
(A *Geo-ICT Tool*)



J Adinarayana, Sami Azmi, G Tewari and D Sudharsan, *International Journal of Computers & Electronics in Agriculture*, Elsevier , 62(2), 128-140, 2008

Contributions from Natural Resources Engineering Faculty / Students / Research Personnel of CSRE, IIT Bombay

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GramyaVikas is a spin-off of:

GIS based rural development planning at district/sub-district level

An R&D Project from the Ministry of Rural Development, Government of India, under the Department of Land Resources Scheme: Technology Development, Extension & Training (TDET)

In the context of rural India, planning mainly consists of the distribution of resources (infrastructure, subsidies, assistance) according to various 'schemes' that are mandated by Central or State governments. These schemes are fostered by different line departments represented by various ministries

Rural Planning

Prescriptive planning

Executive Approach (Top-down)

Client : **Decision-maker at district/sub-district level (*Rural Extension Community*)**

Needs Assessment

(Workshop on 2005 November, 11)

Purpose

To understand the data needs/gaps, and generate the system / tool / software to suit the requirement of the User Organizations

User Departments received the Pre-Workshop Questionnaire

Agriculture, District Rural Development Agency, District Water Management Authority, Groundwater, Forests (Social), Forests (Territorial), Irrigation, Panchayat Raj, Planning, Rural Water Supply, Survey & Land Records

Pre-Workshop Questionnaire Format

1. Name of the Department and contact details of the Head of the Department
2. Major policies/objectives of the Department
3. Rural development planning / programmes and procedures presently carried out by Department
4. The data (spatial/non-spatial) / information currently used by the Department for various rural planning programmes
5. Data and new procedures that would be required by the Department for the modified specifications
6. Modifications the Department would like to introduce in the procedures, given the GIS system
7. Availability of hardware/software in the department for various rural development programmes (particularly on Remote Sensing and GIS)
8. Capacity of the Department to handle the computers/software (on Remote Sensing and GIS)
9. Your expectation from this Research Project
10. Any other suggestions for improving the informatics culture in the district

Observations

- Many Departments are equipped with software/hardware to handle digital / GIS / online data
- Many departments do not have RS and GIS software
- Duplication of data in many cases
- Interdependency of departments on various programmes
- Unavailability of Basic Spatial (*Not GIS*) Layers / Maps
- Essentiality of Distributed Collaboration
- Many Departments are interested in having GIS / Online system for RD planning

Expectations from the Users

- User-friendly GIS / Online system
- GIS based action plans / DSS to improve efficiency of different departments
- Effective linkages of different departments on data sharing
- Development of System/tool with user interaction
- Weather report at grass root level
- Solving instant Filed-level problems
- Monitoring of pests & deceases
- Training in RS and GIS
- Wireless LAN for remote retrieval of water levels/rainfall data
- Monitoring of soil & water conservation structures

Why Distributed Collaboration?

(In the context of Indian rural development planning)

- ◆ Allows to store / share spatial and non-spatial data from different user agencies (data dependency)
- ◆ Avoids data duplication
- ◆ Assists in implementing mutual schemes
- ◆ Allows to incorporate local knowledge-bases from different stakeholders for effective rural development planning
- ◆ Expected to allow flexibility/interconnectivity/coordination

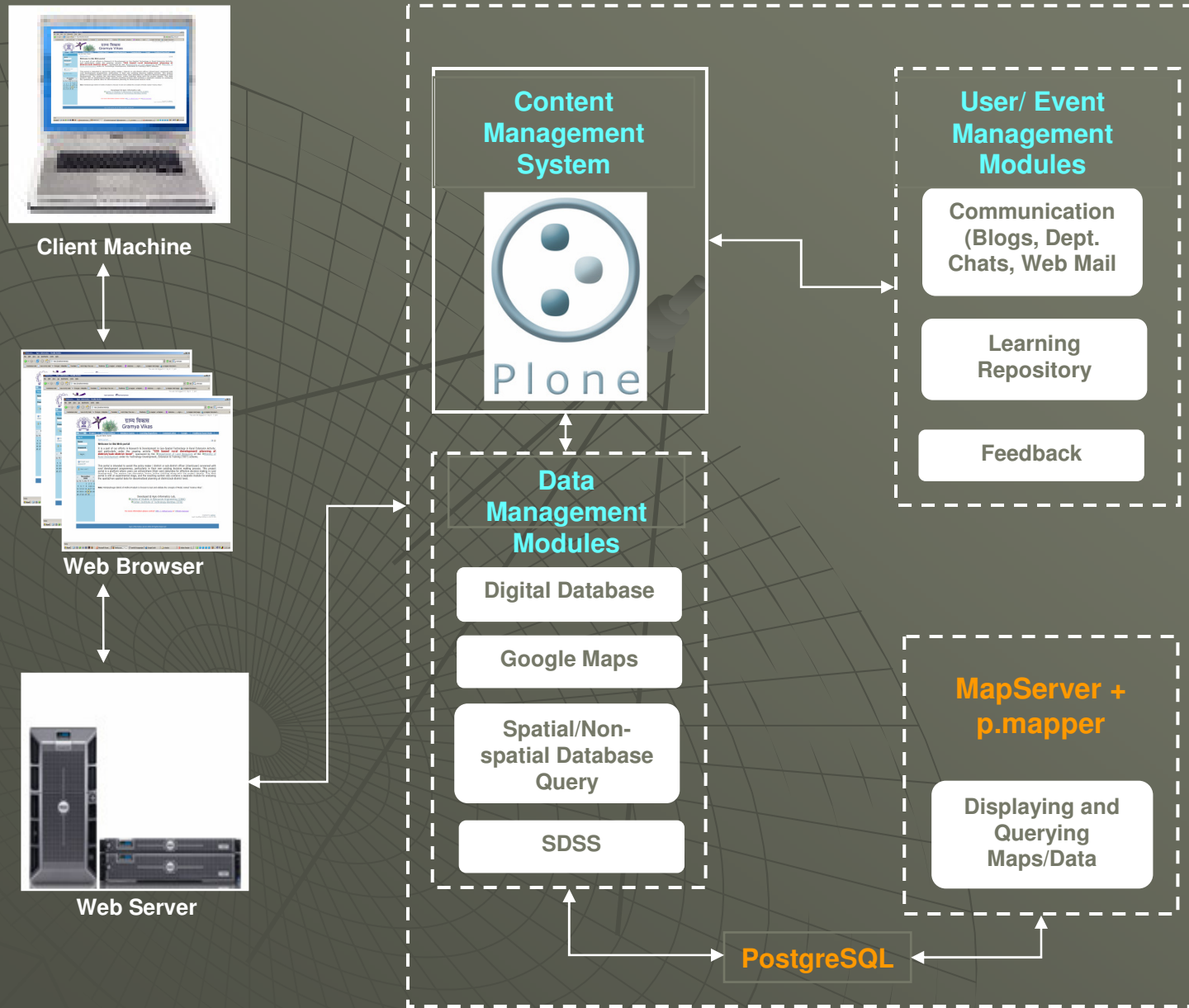
GramyaVikas

- ◆ Evolved from the needs analysis
- ◆ A secured, reliable and fast for distributed collaboration among the Rural Extension Community in the districts *for rural development planning (local-level land based e-governance)*
- ◆ Presently working on *Intranet* environment masonry work
- ◆ Used *open-source* platforms
 - (1) Plone content management system (version 2.5.3)
 - (2) Web GIS / Mapping capabilities with MapServer + p.mapper
 - (3) PostgreSQL for spatial/non-spatial data handling
- ◆ A modular and query-based system for Event/Data/User management :
 - (1) online data sharing / storing
 - (2) intra / Inter departmental communication
 - (3) database (spatial/non-spatial) query to identify candidate villages / entities for various RD schemes
 - (4) assist decision maker in rural development planning decisions

GramyaVikas

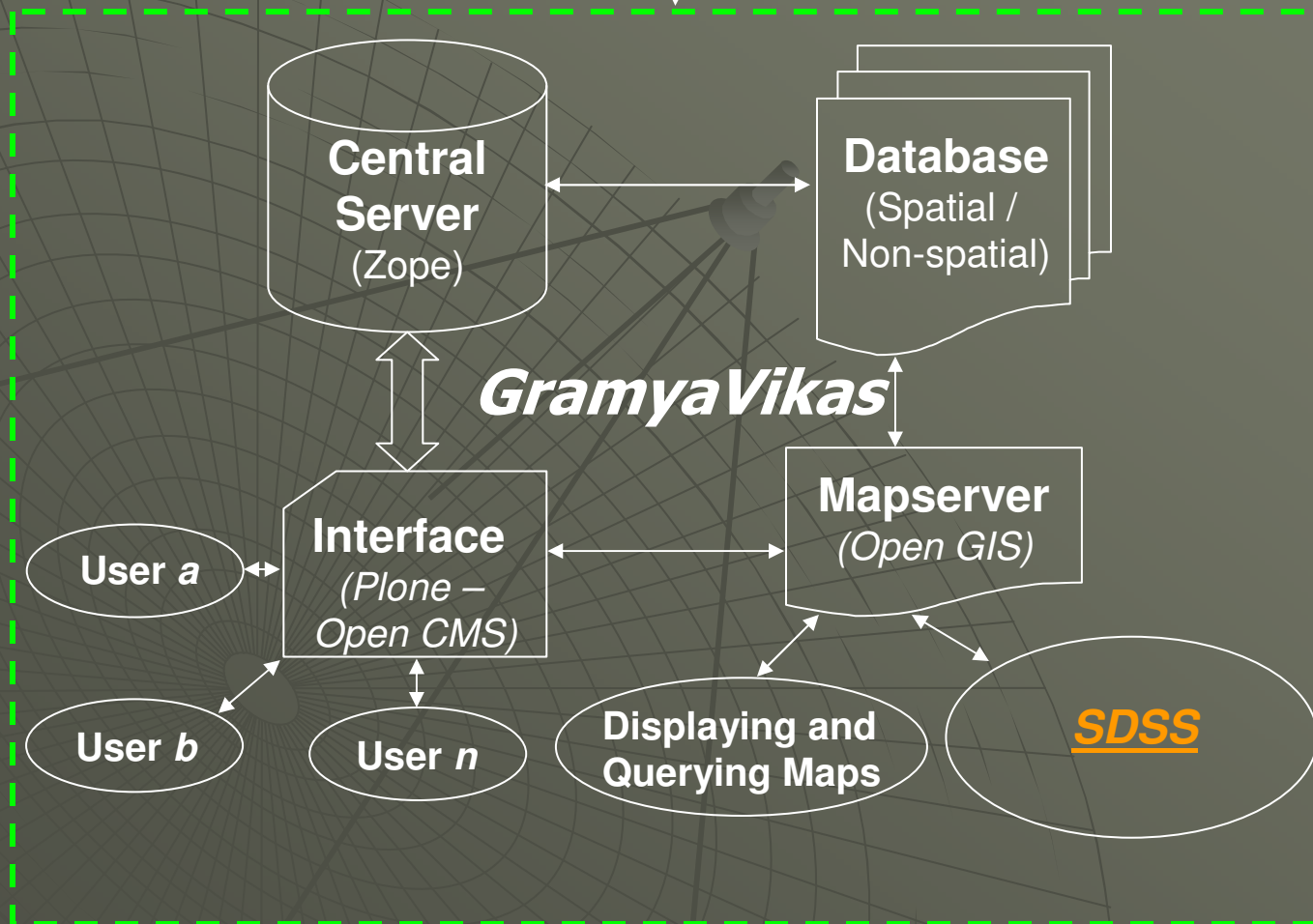
Modules

- **Digital database**
 - **Spatial/non-spatial database** (to store/share/retrieve/visualize data)
 - **Google maps** (to view high resolution satellite data and to serve as ancillary/reference data)
 - **Census** (to view and download Village/Block/District wise information on physical/socio-economic dimensions)
- **Communication** (Webmail/ blog/ departmental communication/ chat)
- **Learning repository** (learning material on various developmental issues and cutting edge technologies)
- **Feedback** (a liaison between user and the developer)
- **Database (spatial/non-spatial) query**
(to serve as a simple DSS for various rural development schemes)
- **SDSS** (to assist the decision makers in identifying the sites for various rural development schemes)



Basic Structure of GramyaVikas

Geo-ICT based RD planning



***GramyaVikas - a holistic model for
RD planning and decision making***

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RURAL DEVELOPMENT
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Log In
Login Name
gramya
Password

log in
Forgot your password?
New user?
February 2008
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3 4 5 6 7 8 9
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17 18 19 20 21 22 23
24 25 26 27 28 29
Welcome to Gramya Vikas
by gramya — last modified 2008-02-01 12:08
Welcome to Gramya Vikas...
It is a part of our efforts in Research & Development in Geo-Spatial Technology in Rural Extension Activity, and particularly under the ongoing activity "GIS based rural development planning at district/sub-district level", sponsored by the Department of Land Resources of the Ministry of Rural Development under its Technology Development, Extension & Training (TDET) scheme.
This portal is intended to assist the policy maker / district or sub-district officer (client/user) concerned with rural development programmes, particularly in their own existing decision making process. This project portal is a platform where users can utilize/share (their own) data/idea for effective decision-making in rural development. The system has discussion forum, online chatting along with the project details. This Web portal is still at experimental stage, and the resulting system also contains a separate module for analysing the spatial/non-spatial data for decentralized planning at district/sub-district level.
Note: Mahabubnagar district of Andhra Pradesh is chosen to test and validate the concepts of Model, named "Gramya Vikas".
To know more about the Gramya Vikas Project, click here
Developed @ Agro-Informatics Lab, Centre of Studies in Resources Engineering (CSRE) Indian Institute of Technology-Bombay (IITB) For more information please contact Dr. J. Adinarayana or Web manager
Last modified 2007-03-12 16:47
powered by PLONE
Start
Welcome to Gramya ...
Desktop MSVDM
10:29 PM

Communication component

Departmental Communication

- ◆ Real time chat/communication for inter/intra departmental activities
- ◆ To share ideas, plans, issues, methodologies, problems, etc. involved in the rural development schemes
- ◆ Communication regarding data sharing, data transfer and other aspects

Blog

- ◆ Discussion forum on any rural development issues/topics

News

- ◆ To post any circulars regarding rural development schemes, articles in newspapers/journals, etc



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Communication



Web Mail

Configure once and check your WebMail through the Gramya Vikas Interface

Blogs

Express your thoughts about the day to day activities going on in the organisation through the Weblog or the Blogs.

Departmental Communication

Communicate with people belonging to same or different departments within the organisation. Discuss issues or project related topics online through Gramya Vikas.

News

Found any thing new ? ... Post it in the news section, share it with people around so that all are aware of what is going on, in and around the organisation.

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digital divide recent

Spatial /
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Blog

digital divide

submitted by admin. on 2005-09-16 21:22.

IT WAS an idea born in those far-off days of the internet bubble: the worry that as people in the rich world embraced new computing and communications technologies, people in the poor world would be left stranded on the wrong side of a "digital divide". Five years after the technology bubble burst, many ideas from the time—that "eyeballs" matter more than profits or that internet traffic was doubling every 100 days—have been sensibly shelved. But the idea of the digital divide persists. On March 14th, after years of debate, the United Nations will launch a "Digital Solidarity Fund" to finance projects that address "the uneven distribution and use of new information and communication technologies" and "enable excluded people and countries to enter the new era of the information society". Yet the debate over the digital divide is founded on a myth—that plugging poor countries into the internet will help them to become rich rapidly.

comments: 1 | read more

add comment edit

blog

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Blog:

digital divide

More...

Learning Repository

- ◆ Learning material for transfer of information and knowledge
- ◆ Contains e-books and documents on various rural developmental issues
- ◆ Documents on cutting edge technologies for policy makers
- ◆ Policy documents



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Learning Repository

▲ Up one level

It's a repository, where you can get learning materials on Agriculture, Remote Sensing and GIS Technologies, Information Technology, Precision Farming, Soil Water Conservation technology and other materials on Rural and Agricultural development.

📁 [Agriculture](#)

In this folder, you will get materials on Agricultural Use.

📁 [Information Technology and Development](#)

Here you will get resources on use of Information Technology for Rural and Agricultural Development.

📁 [Remote Sensing and GIS Technology](#)

It's a folder, where you will get materials on Remote Sensing and GIS Technology and Application for Development.

📁 [Soil and Water Conservation](#)

Here you will get material on Soil and Water Conservation mechanics.

📁 [Others](#)

This folder contains various learning materials on Rural and Agricultural Development.

Digital Database Component

- ◆ This component is only for *GramyaVikas* Members (secured)
- ◆ Uploading and retrieval of spatial and non-spatial digital data
- ◆ Data privileges (for accessing data by different users)
- ◆ Data can also be shared for a defined period



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Digital Database

▲ Up one level

📁 [Spatial Data](#)

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Dhanwada Data

Amangal
Basemaps

Amangal Scenario

Amangal
Watershed
Prioritisation

Non-Spatial data

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Spatial Data

▲ Up one level

📁 [Dhanwada Data](#)

📁 [Amangal Basemaps](#)

This folder contains basemaps of Amangal Mandal

📁 [Amangal Scenario](#)

📁 [Amangal Watershed Prioritisation](#)



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Dhanwada Data

**Amangal
Basemaps**

Amangal Scenario

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Amangal Basemaps

[▲ Up one level](#)

This folder contains basemaps of Amangal Mandal

[amangal_boundary.qml](#)

amangal boundary

[amangal_boundary.svg](#)

[Mahabubnagar Village and Mandal Boundaries](#)

It's a vec file of Mahabubnagar Village and Mandal Boundaries. If you have GRAM++, then you can use this file for your analysis work. You just download ZIP file, Extract it and use in your GRAM++ GIS software.

[Amangal with Village Boundary](#)

[Amangal Mandal with village parcels](#)

[IRS Image with Amangal Mandal and Village Boundary Overlayed on it](#)

[IRS Classified Image](#)

[Map showing Mahabubnagar District Boundary with Mandals](#)



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Dhanwada Data

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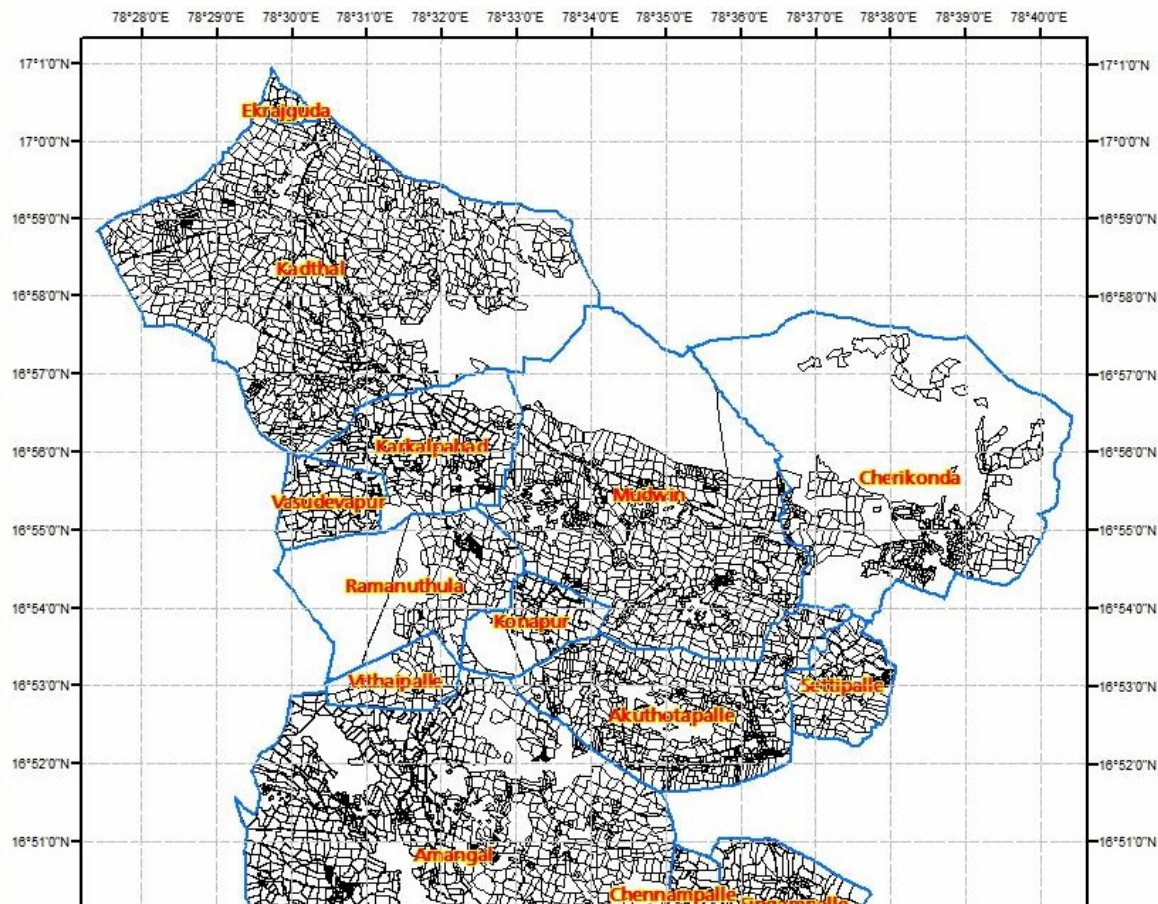
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Amangal Mandal with village parcels

Amangal Mandal with Village Parcels





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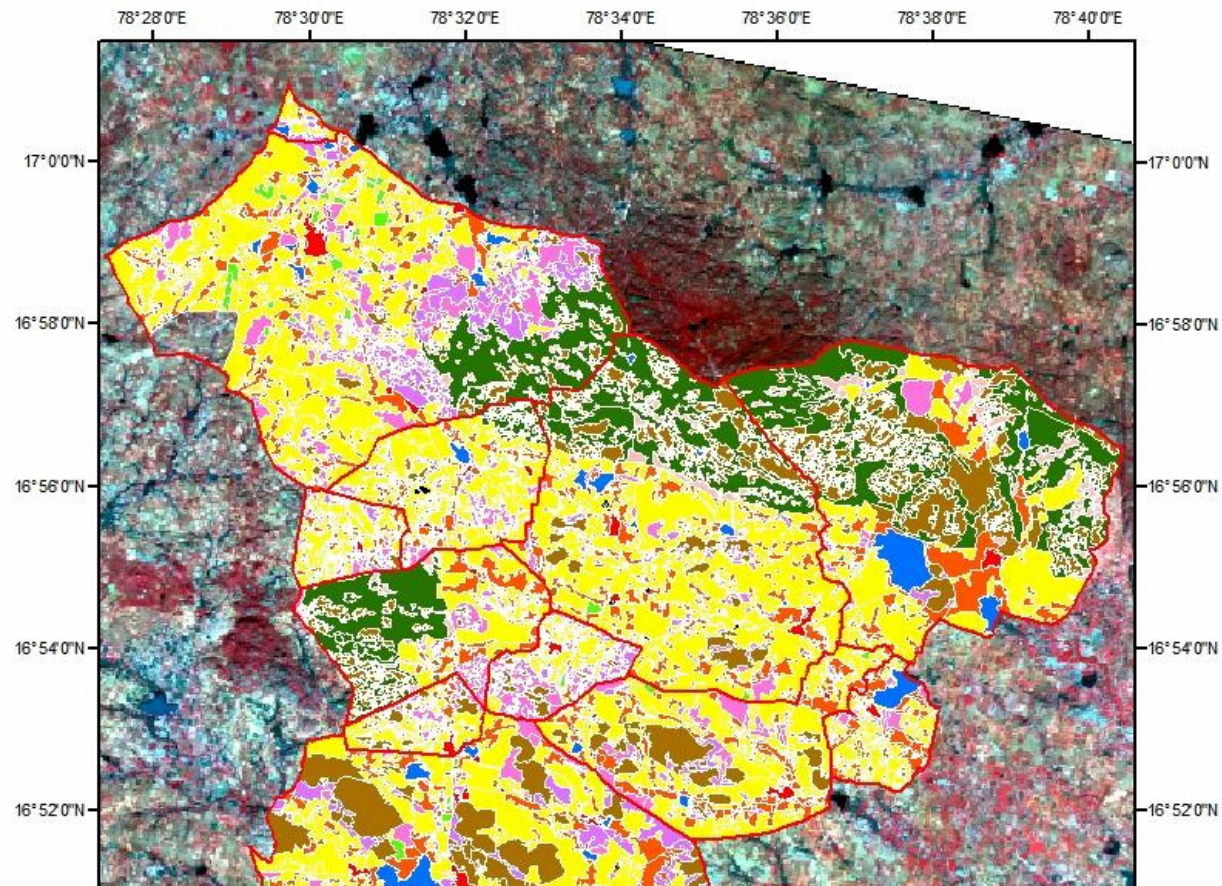
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IRS Classified Image

Land Use Land Cover Classification based on IRS P4 Image



Dhanwada Data

**Amangal
Basemaps**

Amangal Scenario

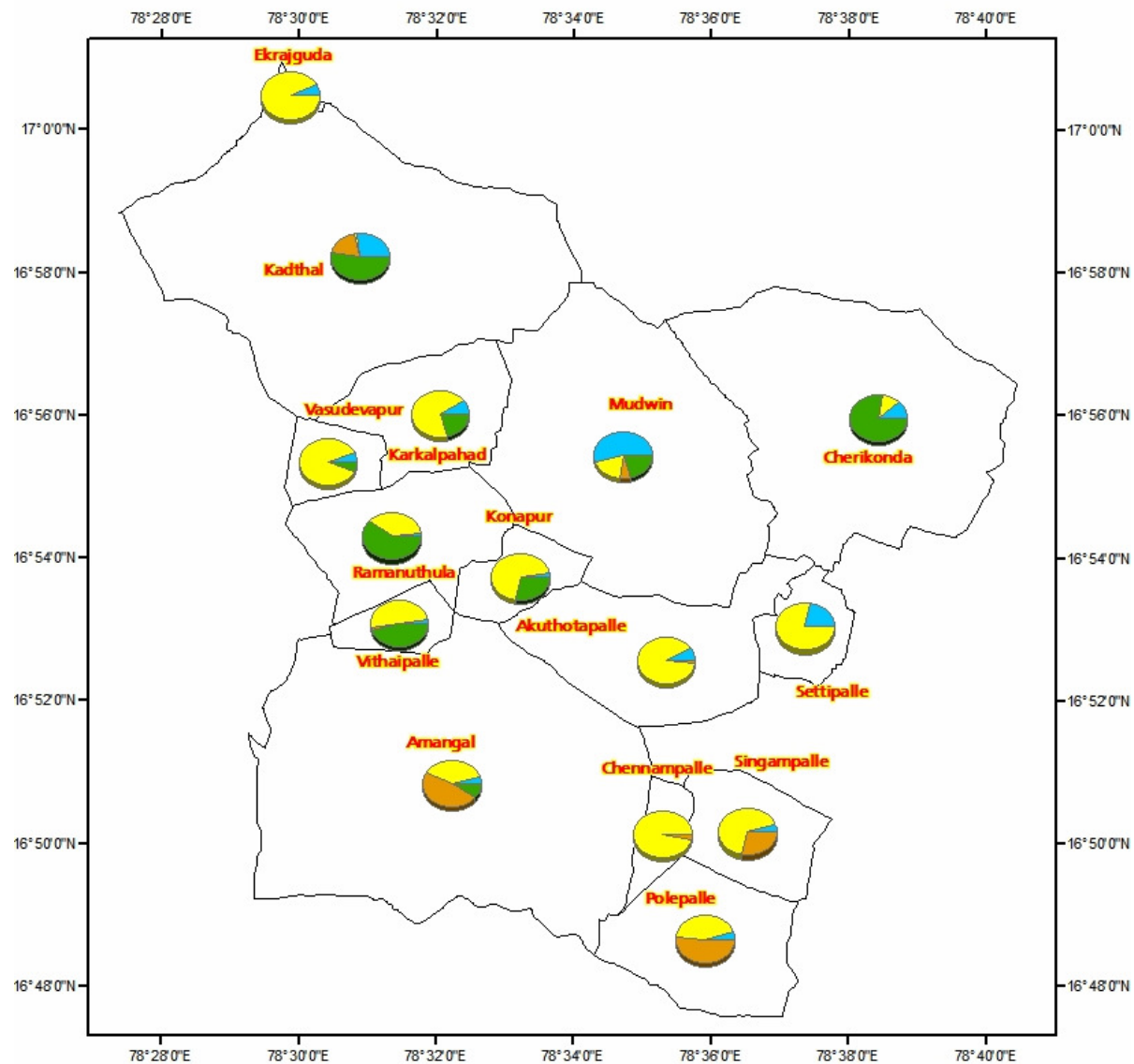
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Legend



TOT_IRR

UN_IRR



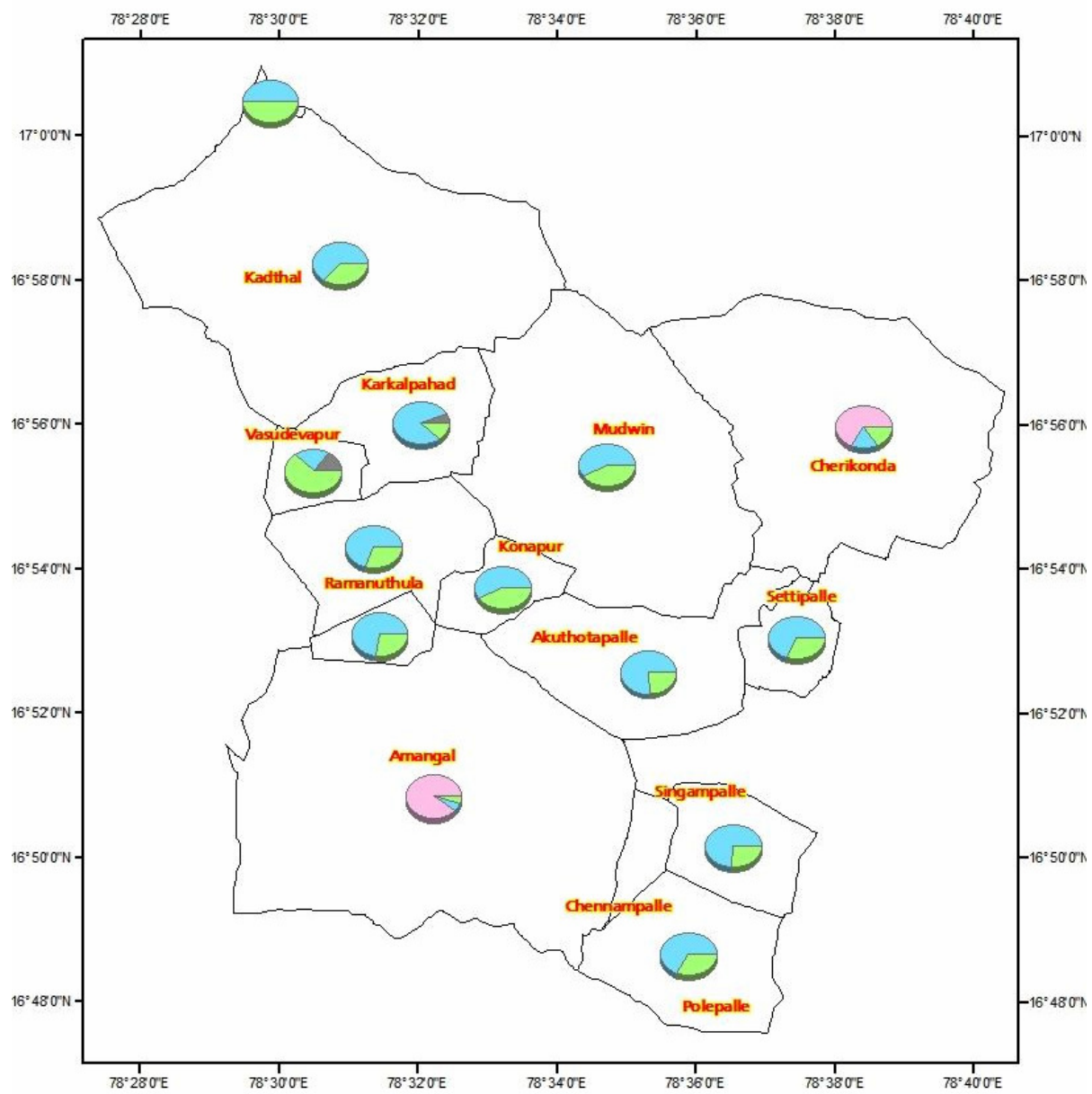
CULT_WASTE



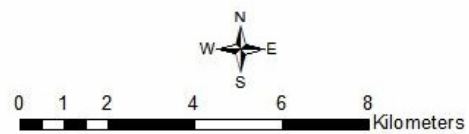
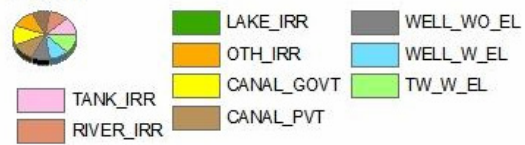
LAND_FORES



0 1 2 4 6 8 Kilometers



Legend





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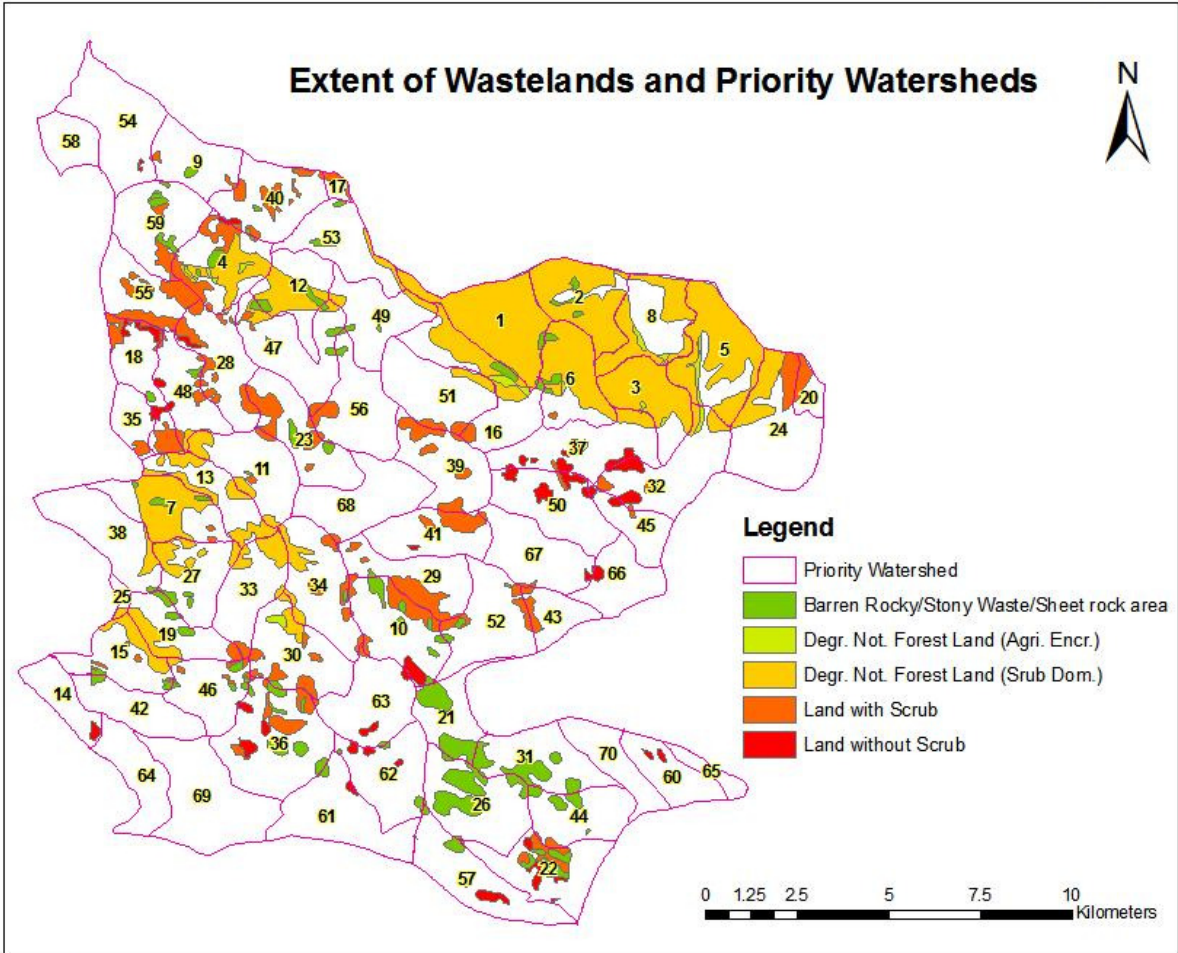
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Non-Spatial data
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Spatial / Non-Spatial Query System
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Extent of Wastelands with Priority Watersheds



Legend

- Priority Watershed
- Barren Rocky/Stony Waste/Sheet rock area
- Degr. Not. Forest Land (Agri. Encl.)
- Degr. Not. Forest Land (Srub Dom.)
- Land with Scrub
- Land without Scrub

0 1.25 2.5 5 7.5 10 Kilometers

Size: 58.2 kB

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The Query Component

Non-spatial

- ◆ Initially developed with MS Access non-spatial (example: census) database
- ◆ Presently available with better user-friendly interface (HTML/JSP front-end)

Spatial

- ◆ Spatial query with ALOV MAP/TM Java GIS software
- ◆ Useful to identify candidate villages/parcels/entities for various mandated schemes
- ◆ More improved/interactrive version with the P-Mapper/MapServer (*under development*)



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[Table:](#)

village

[Enter Conditional Query](#)

select NAME, MANDAL from village where
SC_POPUL>500

[Fields:](#)

- SC_POPUL
- M_MARGINAL
- F_MARGINAL
- M_NON_WORK
- F_NON_WORK
- PADDY_IRRI
- PADDY_TOTAL
- GNUT_IRRI
- GNUT_UNIRRI
- GNUT_TOTAL
- BARN_UNCAL_LAND
- NON_AGR_LAND
- NET_SOWN_AREA
- POSTOFFICE
- SCHOOLS_PRI
- PRI_AGR_CRDT_SOCIETY
- POPU_TOTAL
- SC_POPUL
- ST_POPUL
- AGRI_LBR_M
- AGRI_LBR_F
- FOREST

[Field Values](#)

OK Cancel

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```
select NAME, MANDAL from village where SC_POPUL>500
```

NAME	MANDAL
KISTAPUR	DHANWADA
DHANWADA	DHANWADA
THIRUMALAPUR	NARAYANPET
PEDDAJATRAM	UTKOOR
KOLLAMPALLE	NARAYANPET
KISTAPUR	DHANWADA
MARIKAL	DHANWADA
BIJWAR	UTKOOR



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Table:

village

[Enter Conditional Query](#)

```
select NAME, MANDAL, DNAME from village
where SC_POPUL>500 and NET_SOWN_AREA>100
and FOREST>=500 and BARN_UNCAL_LAND>=400
```

Fields:

BARN UNCAL LAND

M_MARGINAL
F_MARGINAL
M_NON_WORK
F_NON_WORK
PADDY_IRRI
PADDY_TOTAL
GNUT_IRRI
GNUT_UNIRRI
GNUT_TOTAL
BARN_UNCAL_LAND
NON_AGR_LAND
NET_SOWN_AREA
POSTOFFICE
SCHOOLS_PRI
PRI_AGR_CRDT_SOCIETY
POPU_TOTAL
SC_POPUL
ST_POPUL
AGRI_LBR_M

Field Values



Cancel



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Your query is:

```
select NAME, MANDAL, DNAME from village where SC_POPUL>500 and NET_SOWN_AREA>1000 and  
FOREST>=500 and BARN_UNCAL_LAND>=400
```

NAME	MANDAL	DNAME
KISTAPUR	DHANWADA	Mahabubnagar
DHANWADA	DHANWADA	Mahabubnagar
KISTAPUR	DHANWADA	Mahabubnagar



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Spatial / Non-Spatial Query System



Non-Spatial Query System

For Non-Spatial Query Module Please [CLICK HERE >>>](#)

Spatial Query Module

For GIS Based Query Module Please [CLICK HERE >>>](#)

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Contributors :

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Non-Spatial Query System

Please select the table that you want to query ! There are different tables listed below,

Village - This is the village data

Census - This is the census2001 data

Parcel - Parcel data of each and every parcel

Select any one table and then you will automatically directed to the main query window which will allow you do do further querying on that table.

Table:

village
-
village
[census\$]
[parcel\$]

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2006-11-04

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« **March 2007** »

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contents view edit properties sharing

add new item state: visible

Non-Spatial Query System

CR_YEAR
CR_IRR_TYPE
CR_W_DRAW
CR_IRR_EXT
CR_IRR_EXT1
CR_YIELD
CR_VAO_REM
CR_RI_REM
CR_MRO_REM
CR_REMARKS

Get All Values

SELECT

"CR_YEAR", "CR_SNO", "CR_SSID", "CR_IRR_EXT"

FROM VILLAGE WHERE;

"CR_IRR_EXT" Reset

Your Conditional Query :

SELECT "CR_YEAR", "CR_SNO", "CR_SSID", "CR_IRR_EXT" FROM [parcel\$]

OK Reset

Sample Queries :

1) SELECT * FROM VILLAGE;
2) SELECT SID, MNAME, MANDALS FROM VILLAGE;
3) SELECT SID, VIL_MBNR_I, AREA, MANDAL, VNAME FROM VILLAGE WHERE MANDAL = 'UTKOR';
4) SELECT SID, VIL_MBNR_I, AREA, MANDAL, VNAME FROM VILLAGE WHERE SID > 7;

Operators :

= <> LIKE

> >= AND

< <= OR

% () NOT

IS WHERE

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contents view edit properties sharing

add new item state: visible

Non-Spatial Query System

[Back to Query Window](#)

"CR_IRR_EXT" Your query is:

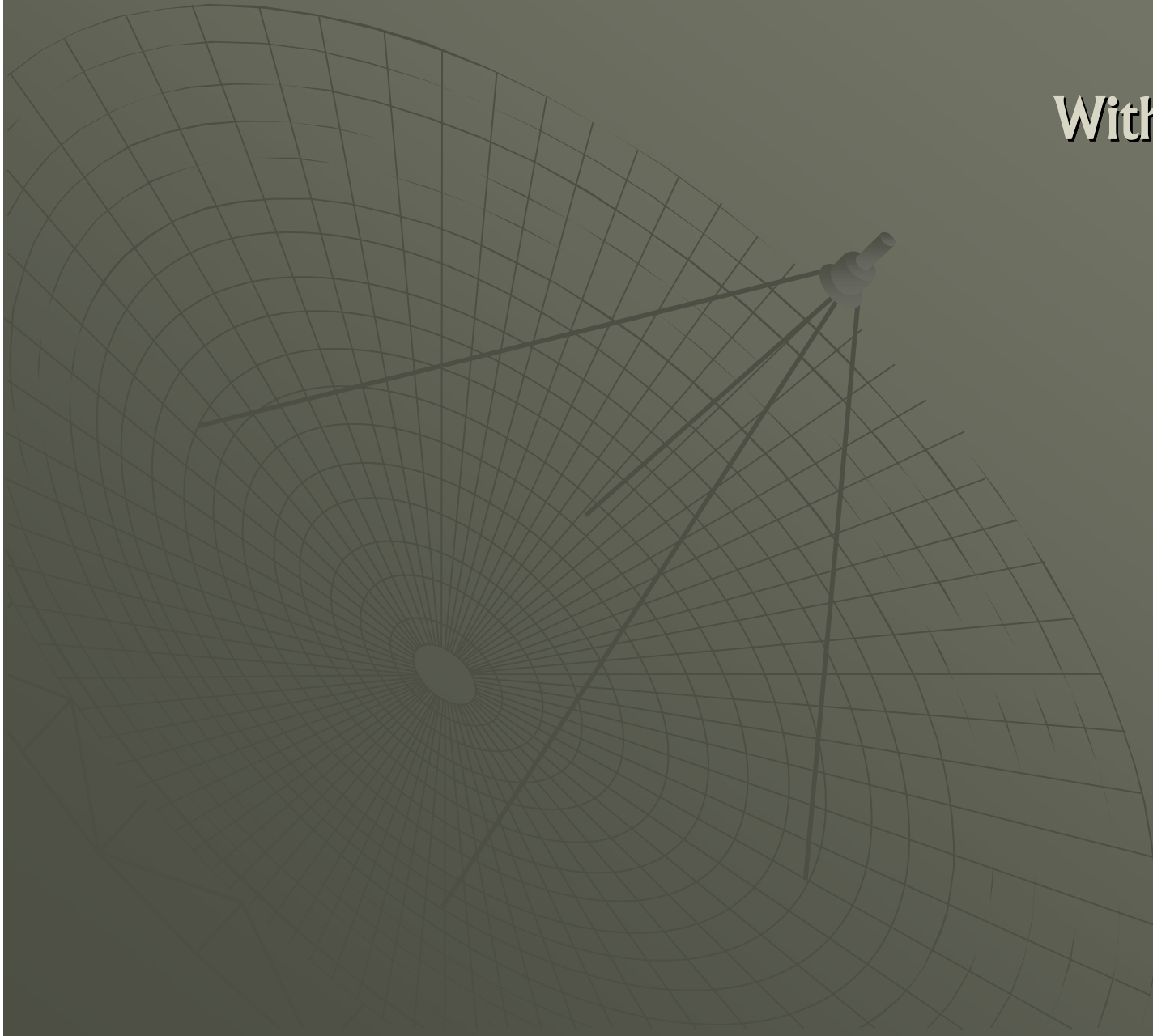
SELECT "CR_YEAR", "CR_SNO", "CR_SSID", "CR_IRR_EXT" FROM [parcel\$]

sun.jdbc.odbc.JdbcOdbcResultSetMetaData@3b1f38 sun.jdbc.odbc.JdbcOdbcResultSet@17ec9f7

CR_YEAR	CR_SNO	CR_SSID	CR_IRR_EXT
2004.0	117/?/2	141600015N200320	0.0
2004.0	117/?/3	141600015N200318	0.0
2004.0	117/?/3	141600015N200318	0.0
2004.0	118/?	141600015N200120	0.0
2004.0	118/?	141600015N200120	0.0
2004.0	118/?/1	141600015N200118	0.0
2004.0	118/?/2	141600015N200396	0.0
2004.0	118/?/3	141600015N200397	0.0
2004.0	118/?/4	141600015N200398	0.0
2004.0	118/?	141600015N220113	0.0
2004.0	119/1/?	141600015N200259	0.0
2004.0	119/1/?	141600015N200259	0.0
2004.0	119/1/?	141600015N200114	0.0

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With *ALOV*





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	1	2	3
--	---	---	---

4	5	6	7	8	9	10
---	---	---	---	---	---	----

11 12 13 14 15 16 17

11 12 13 14 15 16 17
18 19 20 21 22 23 24

18	19	20	21	22	23	24
25	26	27	28	29	30	31

25	26	27	28	29	30	31
----	----	----	----	----	----	----

[contents](#)[view](#)

edit

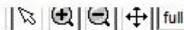
properties

sharing

add new item ▼

state: visible ▼

Gramya Vikas - Spatial Query System



|| full

|unnamed

|unnamed

▼ India

☐ ▼ AP_District Boundary

☐ ▼ Amangal Mandal



▼ Chennampalle



LOG

Selected [India]

```
SELECT * from GEODATA WHERE SURVEY_NO =
```

AND ▼

Feature Type = Crop Land

AND

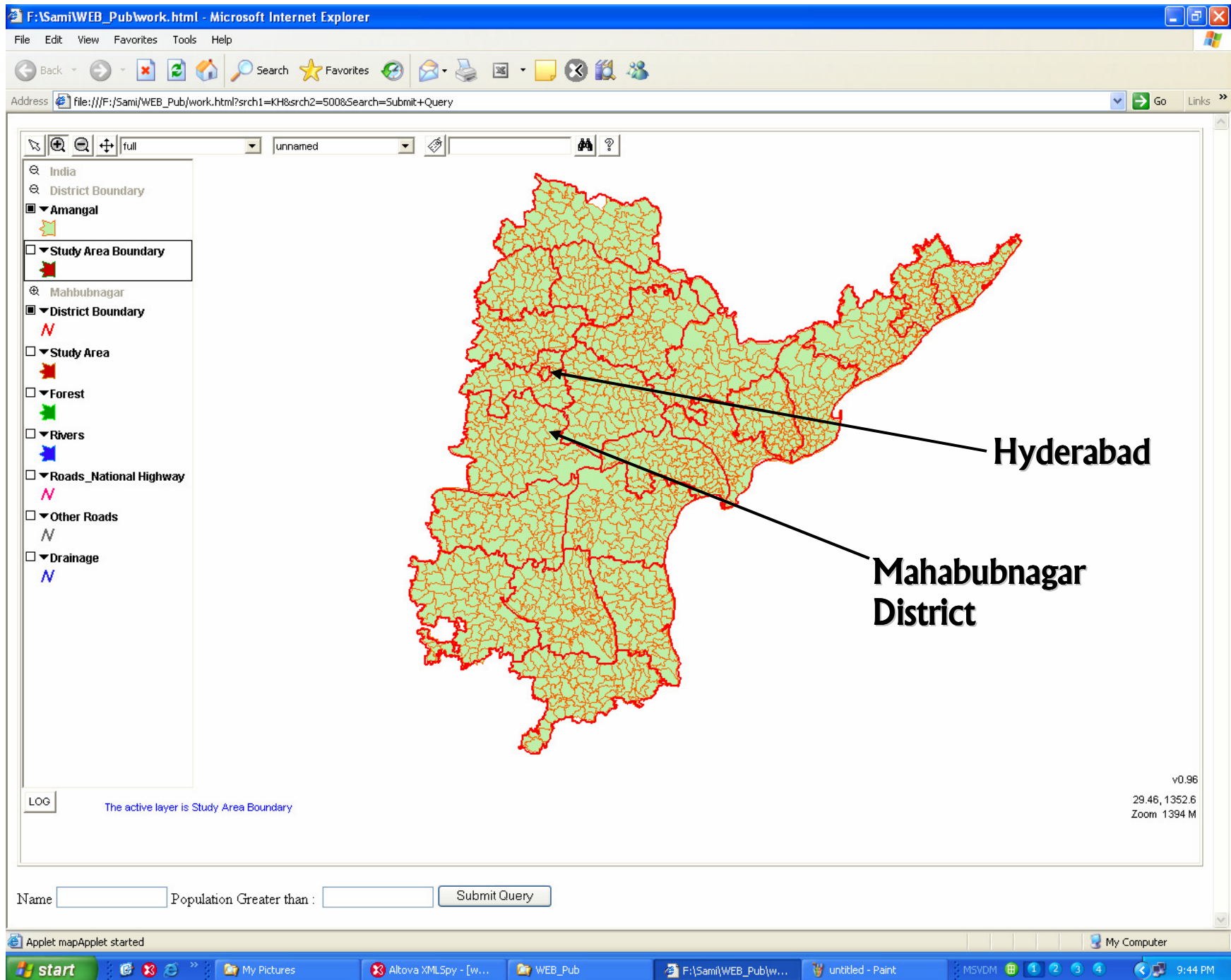
Feature Type = -

Search

Reset

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Mozilla Firefox

File Edit View Go Bookmarks Tools Help

file:///F:/Sami/WEB_Pub/workflow.htm

Customize Links Yahoo! Mail - The bes... Welcome to Gmail Save to My Web Main Page - Wikipedia... Google Search ArcIMS Viewer Translate workflow.htm

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Spatial Search

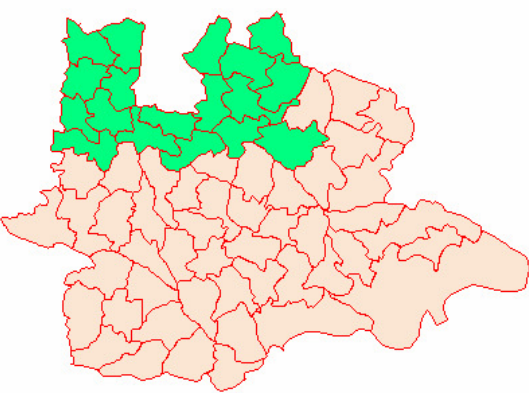
Default search on Description field Search dialogue

India
Andhra Pradesh
▼ Mahbubnagar District
Amangal Study
Ekarajguda

Attribute Data

FID_	AREA	PERIMETER	APMANDAL_	APMANDAL_I	MANDAL	AREA1	RES_HOUSE	HOUSEHOLDS	T_POPLN	T_M_POPLN	T_F_POPLN	POPLN_M6	POPLN_F6	M_SC	F_SC	M_ST	F_ST	IV
0	229.2123	78.83998	475	140677	KOTHUR	19584.71	8449.0	8639.0	45491.0	23689.0	21802.0	4590.0	4483.0	4086.0	3968.0	2041.0	1957.0	8
0	243.3488	71.02884	478	140675	KONDURG	25888.89	8463.0	8500.0	48048.0	24102.0	23946.0	4871.0	4860.0	5545.0	5520.0	1234.0	1108.0	7
0	231.7558	79.98961	481	140665	KODANGAL	23844.81	7412.0	7486.0	42586.0	21406.0	21180.0	3894.0	3877.0	4059.0	3968.0	862.0	796.0	8
0	246.1492	70.25477	482	140666	BOMRASPETA	24431.6	6912.0	7031.0	40462.0	20160.0	20302.0	3895.0	4008.0	3277.0	3360.0	4205.0	4154.0	4
0	261.4143	81.9642	508	140676	FAROOQNAGAR	27966.53	9963.0	9964.0	52858.0	26818.0	26040.0	5548.0	5465.0	5261.0	5151.0	3998.0	3590.0	8
0	272.6385	82.40804	515	140678	KESHAMPETA	22342.61	6673.0	6992.0	35120.0	17866.0	17254.0	3443.0	3279.0	3826.0	3708.0	1451.0	1362.0	5
0	212.5499	73.07674	521	140668	DOULATABAD	20938.0	6647.0	6668.0	37641.0	18962.0	18679.0	3600.0	3467.0	3099.0	3080.0	1534.0	1404.0	4
0	181.7525	67.45979	528	140667	KOSGI	17452.45	6175.0	6202.0	34510.0	17095.0	17415.0	3364.0	3350.0	3180.0	3199.0	1060.0	1101.0	4
0	265.7119	111.8701	538	140674	BALANAGAR	30569.55	9170.0	9188.0	49727.0	25129.0	24598.0	5324.0	5258.0	4438.0	4389.0	6820.0	6337.0	6
0	218.6619	82.09185	540	140673	NAWABPET	15140.04	6069.0	6073.0	35684.0	18317.0	17367.0	3184.0	3079.0	5274.0	5016.0	73.0	93.0	6

Java Applet Window



v0.96
516.92, 1876.81
Zoom 610 M

LOG Selected features 18 [Mahbubnagar Dist]

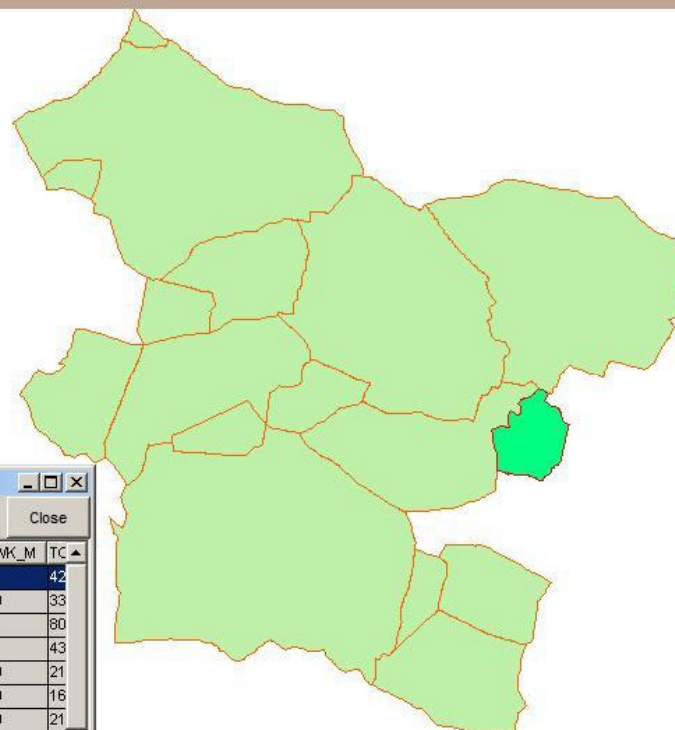
Applet mapApplet started

start Macromedia Dreamw... WEB_Pub TextPad - [F:/Sami/... Mozilla Firefox Attribute Data MSVDM 1 2 3 4 9:49 PM

Default search on Description field

Search dialogue

- India
- District Boundar
- ▼ Amangal
- Mahbubnagar
- District Boundar
- Study Area



Attribute Data

1:7 On Map Link Close

M_06	F_06	P_SC	M_SC	F_SC	P_ST	M_ST	F_ST	P_LIT	M_LIT	F_LIT	P_ILL	M_ILL	F_ILL	TOT_VWK_P	TOT_VWK_M	TC
116.0	96.0	528.0	271.0	257.0	0.0	0.0	0.0	534.0	354.0	180.0	1034.0	443.0	591.0	890.0	466.0	42
1656.0	1473.0	3195.0	1654.0	1541.0	4171.0	2204.0	1967.0	9910.0	6261.0	3649.0	10557.0	4336.0	6221.0	9002.0	5630.0	33
230.0	195.0	553.0	276.0	277.0	684.0	361.0	323.0	1420.0	926.0	494.0	1899.0	779.0	1120.0	1760.0	951.0	80
144.0	147.0	392.0	195.0	197.0	25.0	12.0	13.0	417.0	292.0	125.0	1254.0	548.0	706.0	912.0	479.0	43
804.0	645.0	1221.0	636.0	585.0	4016.0	2242.0	1774.0	3456.0	2398.0	1058.0	5745.0	2556.0	3189.0	4755.0	2654.0	21
498.0	473.0	817.0	461.0	356.0	400.0	214.0	186.0	1887.0	1337.0	550.0	4187.0	1873.0	2314.0	3471.0	1851.0	16
804.0	645.0	1221.0	636.0	585.0	4016.0	2242.0	1774.0	3456.0	2398.0	1058.0	5745.0	2556.0	3189.0	4755.0	2654.0	21

v0.96

996762.3, 979924.94
Zoom 49043 M

SELECT * from GEODATA WHERE NAME LIKE

OR P_SC (Population SC) > 500 OR TOT_IRR (Total Irrigated Land) > 70 Search Reset

(P_SC > 500) OR (TOT_IRR > 70)

Query String :



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contents view

Gramya Vikas - S

▼ Chennampalle

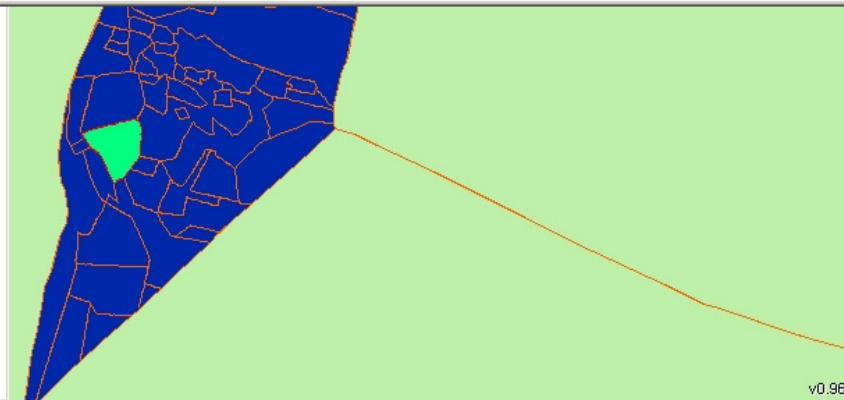
Ekrajguda

Attribute Data

12:36 On Map Link

Survey_no	Vill_Name	Mandal	OID_	CR_VCODE	VILL_NAM_1	CR_YEAR	CR_SNO	CR_SSID	CR_SEASON	CR_MONTH	CR_SOW_TYP	CR_CROP
17	Chennampalle	Amangal	83	1416014	Chennampa	2004	17	1416000140010900	601	706	M	814
6	Chennampalle	Amangal	245	1416014	Chennampa	2004	6	1416000140000020	601	706	M	814
52	Chennampalle	Amangal	220	1416014	Chennampa	2004	52	1416000140006400	601	706	S	814
49	Chennampalle	Amangal	204	1416014	Chennampa	2004	49	1416000140007200	601	706	M	814
36	Chennampalle	Amangal	44	1416014	Chennampa	2004	36	1416000140007000	601	706	S	814
32	Chennampalle	Amangal	22	1416014	Chennampa	2004	32	1416000140009500	601	706	S	800
7	Chennampalle	Amangal	250	1416014	Chennampa	2004	7	1416000140003800	601	706	S	814
16	Chennampalle	Amangal	207	1416014	Chennampa	2004	16	1416000140005000	601	706	M	814

Java Applet Window



LOG

Found 36

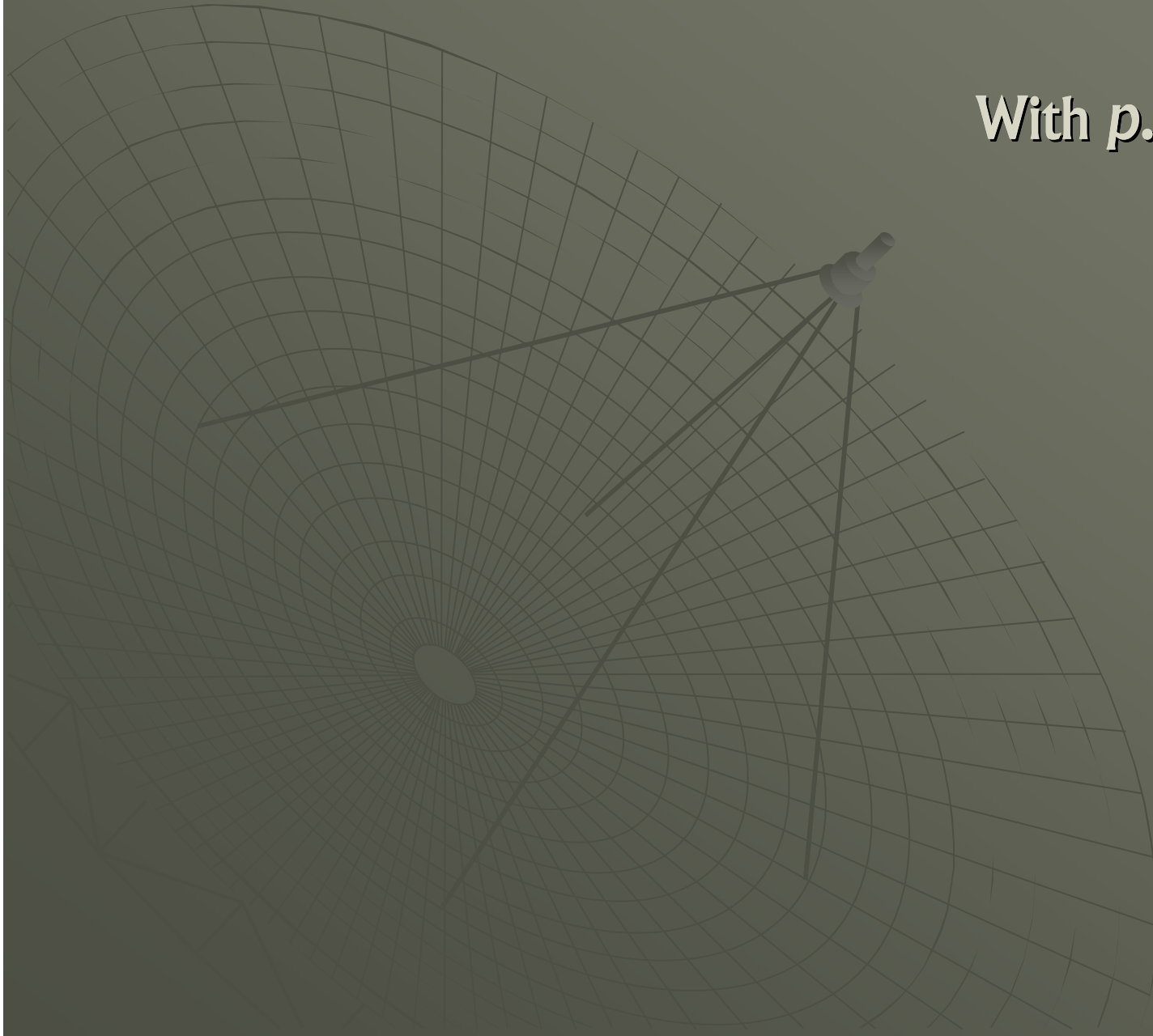
990850.75, 982510.8
Zoom 3898 M

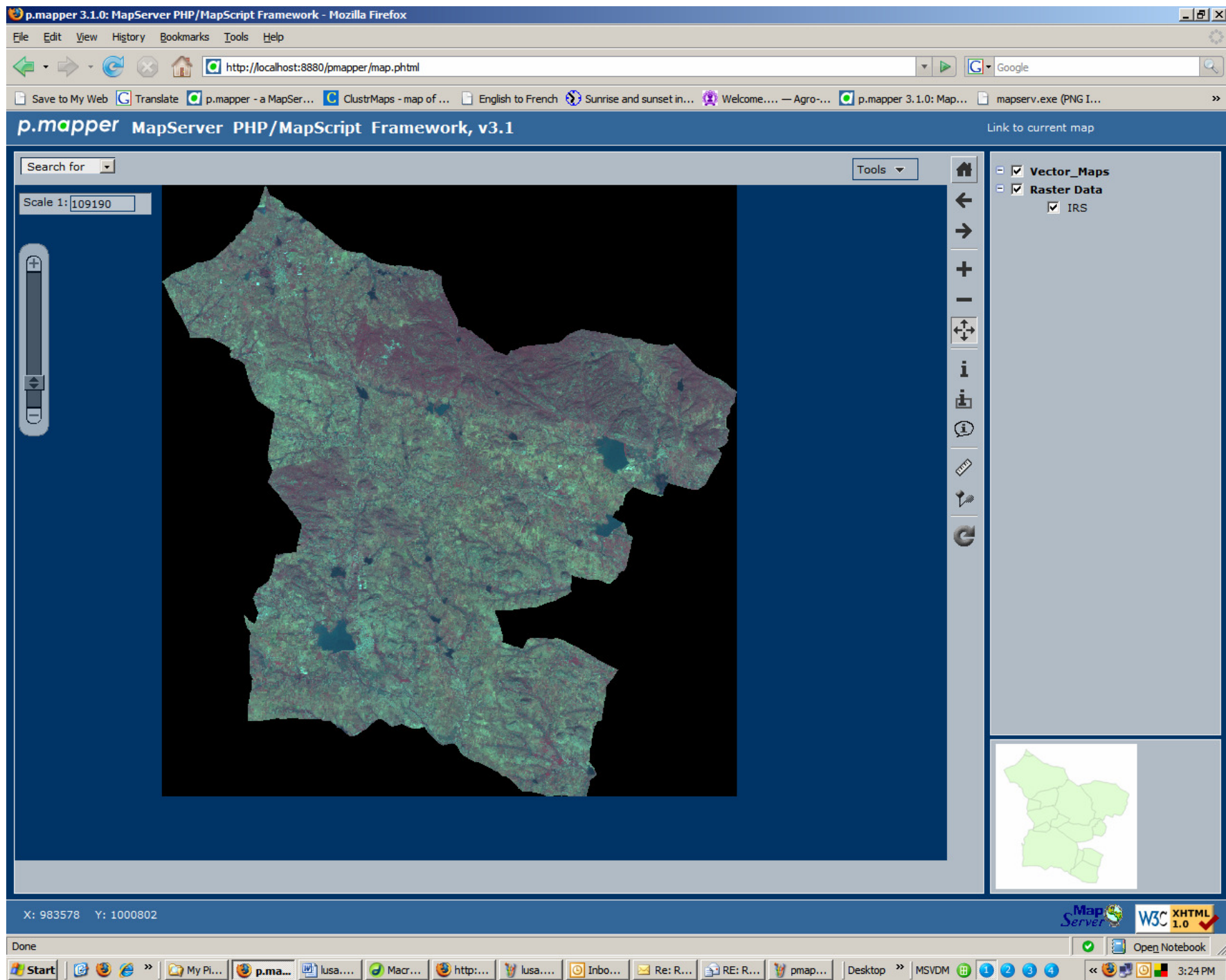
SELECT * from GEODATA WHERE MANDAL LIKE

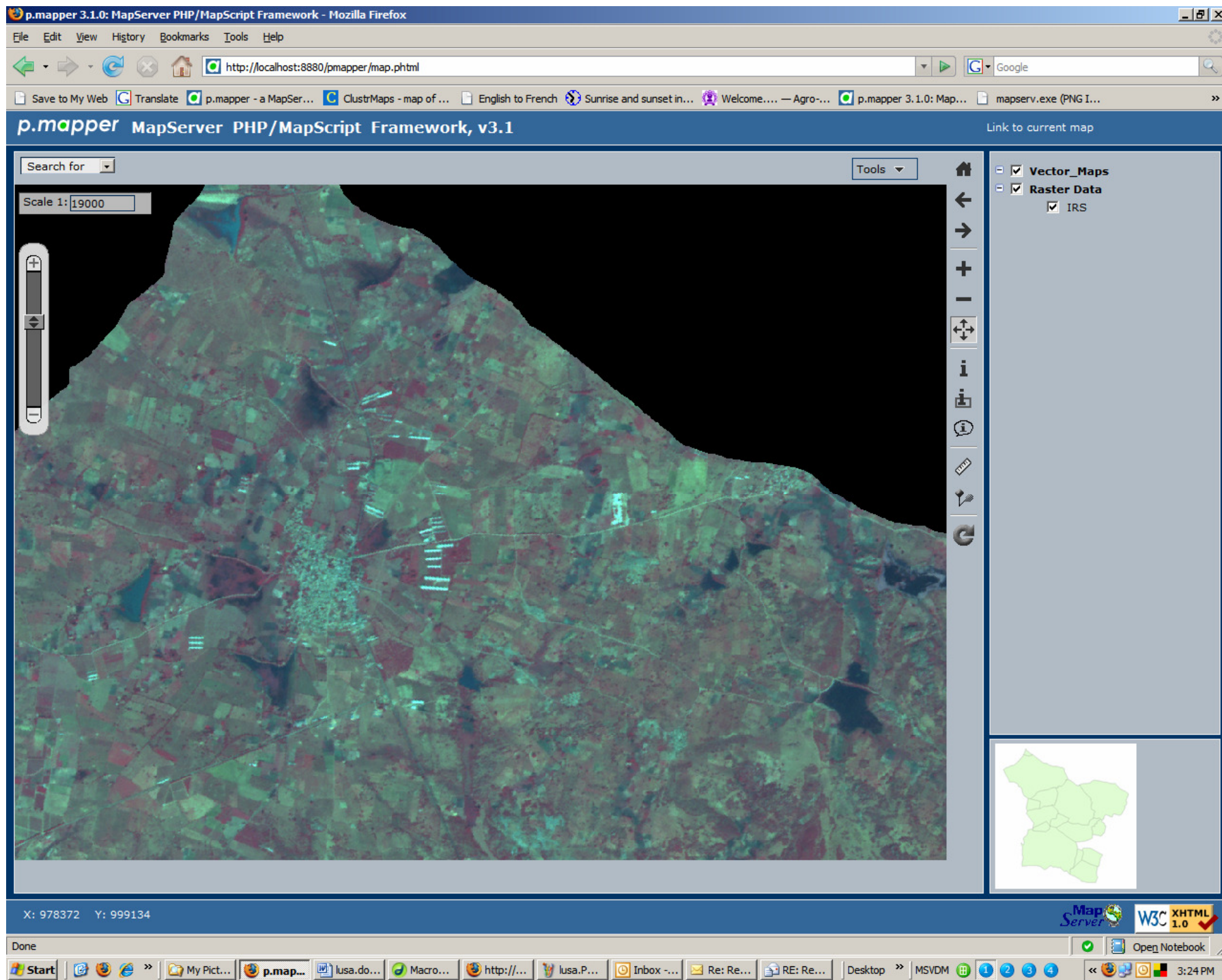
OR CR_CROP(Crop Type) = 800 OR
CR_CROP(Crop Type) = 814 Search Reset

Created by admin
Last modified 2007-03-30 12:38

With *p.mapper*







p.mapper 3.1.0: MapServer PHP/MapScript Framework - Mozilla Firefox

File Edit View History Bookmarks Tools Help

http://localhost:8880/pmapper/map.phtml

Save to My Web Translate p.mapper - a MapSer... ClustrMaps - map of ... English to French Sunrise and sunset in... Welcome... - Agro-... p.mapper 3.1.0: Map... mapserv.exe (PNG I...

Gramya Vikas Spatial Query System

Link to current map

Search for

Scale 1: 116040

Amangal

FID_1	3
Id	0
Vill_Name	Amangal
Area	6.3825574112
FID_2	530
FID_1_1	908
X	1041035.9296
Y	1155935.9799
FID_2_1	106
NAME	AMANGAL
MANDAL	AMANGAL
REVE_DIVI	MAHBUBNAGA
DISTRICT	MAHBUBNAGA
SID	28
DID	07
TID	0015
VILL_CODE	00630600
VID	280700150063
No_HH	4094.00000000
TOT_P	20467.00000000
TOT_M	10597.00000000
TOT_F	9870.00000000
P_06	3129.00000000
M_06	1656.00000000
F_06	1473.00000000
P_SC	3195.00000000
M_SC	1654.00000000
F_SC	1541.00000000
P_ST	4171.00000000
M_ST	2204.00000000
F_ST	1967.00000000
P_LIT	9910.00000000
M_LIT	6261.00000000
F_LIT	3649.00000000
P_ILL	10557.00000000
M_ILL	4336.00000000
F_ILL	6221.00000000
TOT_WK_P	9002.00000000
TOT_WK_M	5630.00000000
TOT_WK_F	3372.00000000
MNWK_P	6626.00000000
MNWK_M	4820.00000000
MNWK_F	1806.00000000
MN_CL_P	1916.00000000
MN_CL_M	1395.00000000
MN_CL_F	521.00000000
MN_AL_P	911.00000000
MN_AL_M	391.00000000
MN_AL_F	520.00000000
MN_HH_P	195.00000000
MN_HH_M	136.00000000
MN_HH_F	59.00000000
MN_OT_P	3504.00000000

Village_Maps

- ☐ Amangal_Parcel
- ☒ Kadthal
- ☒ Ekrajguda
- ☒ Konapur
- ☒ Karkalpahad
- ☒ Ramanuthula
- ☒ Vasudevapur
- ☒ Chennampalle
- ☒ Settipalle
- ☒ Cherikonda
- ☒ Mudwin
- ☒ Akutotapalle
- ☒ Vittiapalle
- ☒ Singampalle
- ☒ Polepalle

Boundaries

- ☒ Amangal

Raster Data

- ☒ IRS

Apply on Layer: Amangal

X: 983637 Y: 983343

p.mapper MapServer W3C XHTML 1.0

Done

Start pmapper-3.1-beta4 Significant changes than ... p.mapper 3.1.0: MapS... Desktop MSVDM 1 2 3 4 Open Notebook 8:43 PM

p.mapper 3.1.0: MapServer PHP/MapScript Framework - Mozilla Firefox

File Edit View History Bookmarks Tools Help

http://localhost:8880/pmapper/map.phtml

Save to My Web Translate p.mapper - a MapSer... ClustrMaps - map of ... English to French Sunrise and sunset in... Welcome.... - Agro-... p.mapper 3.1.0: Map... mapserv.exe (PNG I...

Gramya Vikas Spatial Query System

Link to current map

Search for Village Name Search

Tools

Scale 1: 71560

☒ Village_Maps

- ☒ Amangal_Parcel
- ☒ Kadthal
- ☒ Ekrajguda
- ☒ Konapur
- ☒ Karkalpahad
- ☒ Ramanuthula
- ☒ Vasudevapur
- ☒ Chennampalle
- ☒ Settipalle
- ☒ Cherikonda
- ☒ Mudwin
- ☒ Akutotapalle
- ☒ Vittiapalle
- ☒ Singampalle
- ☒ Polepalle

☒ Boundaries

- ☒ Amangal

☒ Raster Data

- ☒ IRS

Amangal

FID_1	Id	Vill_Name	Area	FID_2	FID_1_1	X	Y
1	0	Chennampalle	3050547.69242000020	531	933	1045737.22267000000	1154707.58286000000
12	0	Cherikonda	4.09918741169e+007	1040	1371	1053492.82598000000	1163744.64261000000

Zoom to Selected Features

Done

Open Notebook

Apply on Layer Amangal

X: 1001906 Y: 979665

p.mapper MapServer W3C XHTML 1.0

Done

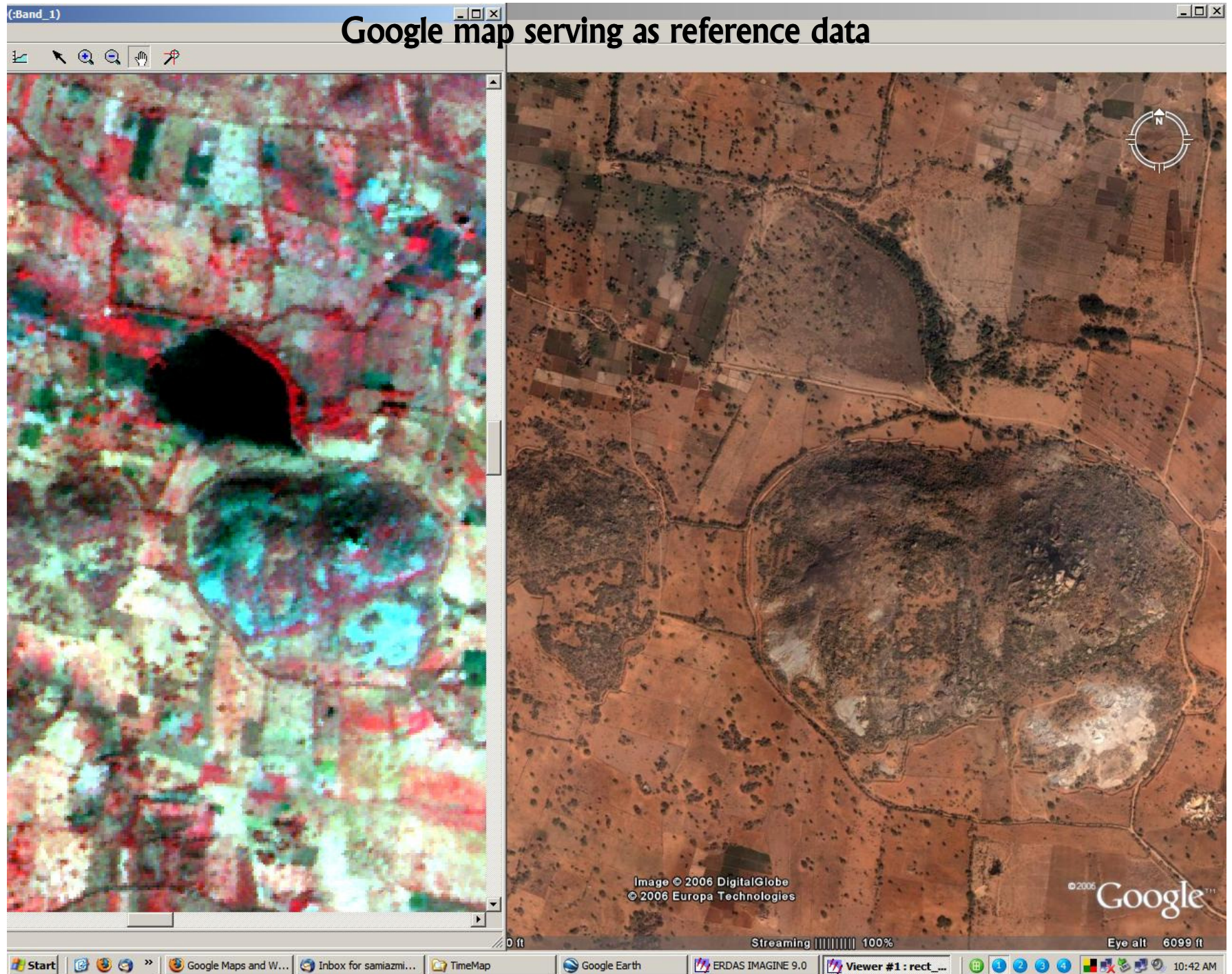
Open Notebook

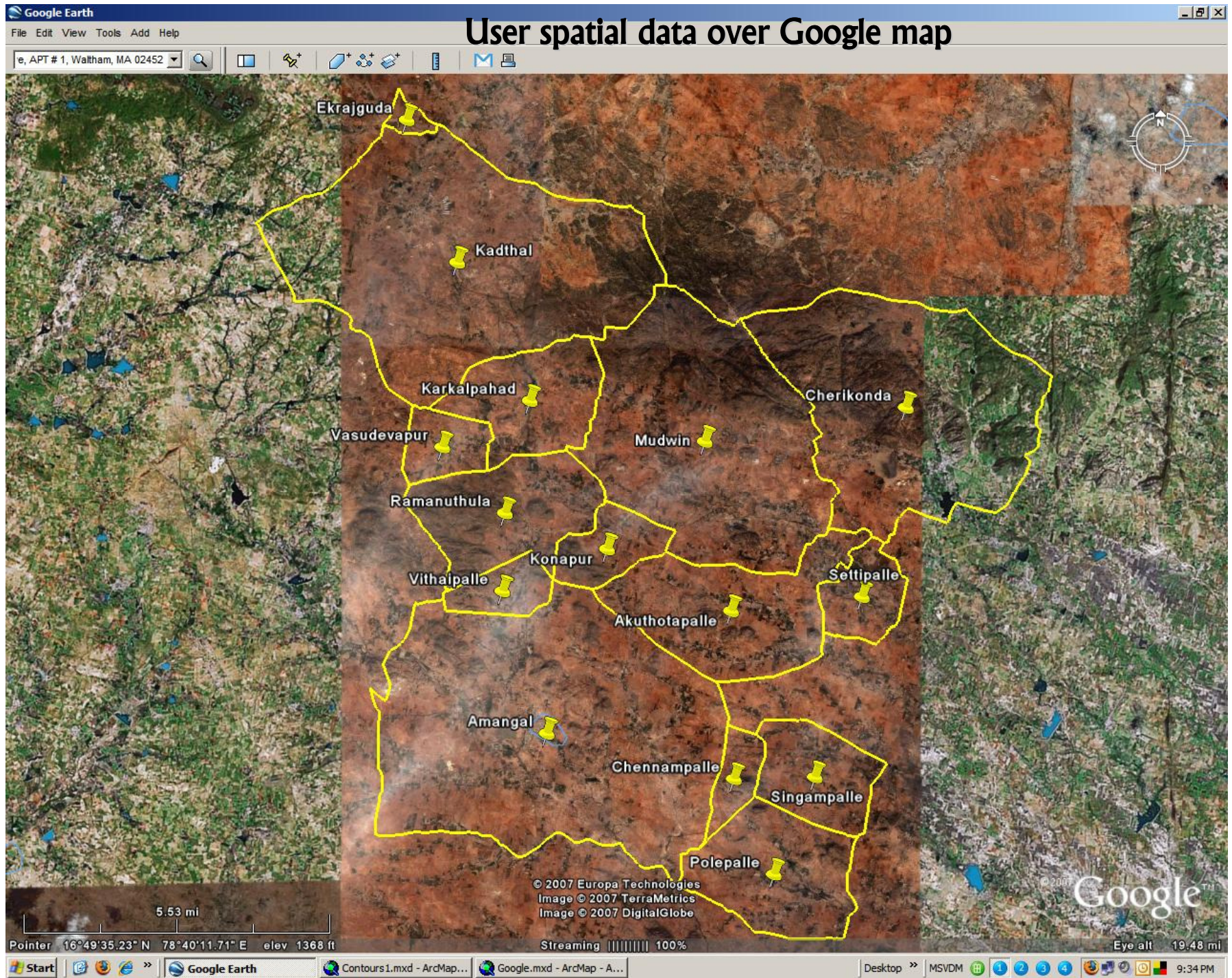
Start p.mapper-3.1-beta4 Significant changes than ... p.mapper 3.1.0: MapSer... http://localhost:8880... Desktop MSVDM 1 2 3 4 8:49 PM



- ◆ Serves as a reference / ancillary data
(due to high resolution)
- ◆ Reduces ground truth collection
- ◆ Tilt and rotate the view to see 3D terrain and buildings
- ◆ Synoptic view of the surrounding areas
- ◆ It allows you to register your own data and designate labels, etc.

Google map serving as reference data





Google Earth

File Edit View Tools Add Help

e, APT # 1, Waltham, MA 02452

User non-spatial data over Google map

Amangal Water Tank

Amangal

Amangal

Amangal

FID = 2
FID_1 = 3
Id = 0
Vill_Name = Amangal
Area = 63825574.1122
FID_2 = 530
FID_1_1 = 908
X = 1041035.92963
Y = 1155935.97991
FID_2_1 = 106
NAME = AMANGAL
MANDAL = AMANGAL
REVE_DIM = MAHBUBNAGAR
DISTRICT = MAHBUBNAGAR
SID = 28
DID = 07
TID = 0015
VILL_CODE = 00630600
VID = 2807001500630600
No_HH = 4094
TOT_P = 20467
TOT_M = 10597
TOT_F = 9870
P_06 = 3129
M_06 = 1656
F_06 = 1473
P_SC = 3195
M_SC = 1654
F_SC = 1541
P_ST = 4171
M_ST = 2204
F_ST = 1967
P_LIT = 9910
M_LIT = 6261
F_LIT = 3649
P_ILL = 10557
M_ILL = 4336
F_ILL = 6221
TOT_WK_P = 9002
TOT_WK_M = 5630
TOT_WK_F = 3372
MNWK_P = 6626
MNWK_M = 4820
MNWK_F = 1806
MN_CL_P = 1916
MN_CL_M = 1395
MN_CL_F = 521
MN_AL_P = 911
MN_AL_M = 391
MN_AL_F = 520
MN_HH_P = 195
MN_HH_M = 136
MN_HH_F = 59

1876 ft

© 2007 Europa Technologies
Image © 2007 DigitalGlobe

Pointer 16°50'39.66" N 78°31'45.43" E elev 1654 ft
Streaming 100%
Eye alt 8152 ft

Start

Google Earth

Contours1.mxd - Arc...

Google.mxd - ArcMa...

GoogleEarthlabel.PN...

mock-up-google-map...

Desktop >>

MSVDM

9:39 PM



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Welcome....
2006-11-04

More...

« March 2007 »

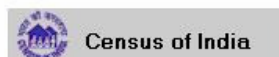
Su	Mo	Tu	We	Th	Fr	Sa
					1	2
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
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[add new item](#) | [state: visible](#)

Census of India



Select One
☒ India and State
☐ India, State and District

Select State
States:

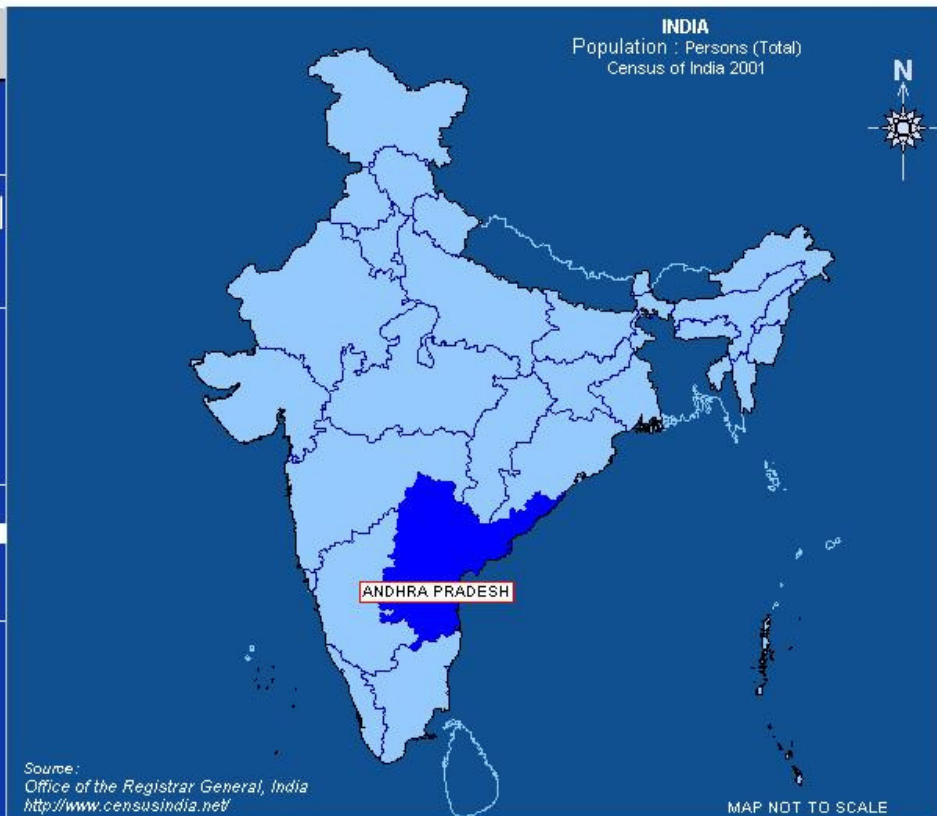
Select Category for Information

Select Indicator for Thematic Map

Build Query:
Range: 166197921 to 60650

Operator: Value:

Change Map Size



Source:
Office of the Registrar General, India
<http://www.censusindia.net/>

MAP NOT TO SCALE

Powered by WhizMap® . Developed By Riddhi

Spatial Decision Support System — Gramya Vikas - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Address <http://localhost:8054/sdss> Go Links »

Web Search

Spatial Decision Support System... Add Tab

log in join

 **Gramya Vikas**
RURAL DEVELOPMENT

[site map](#) [accessibility](#) [contact](#)

search

Home Digital Database Database Query Learning Repository **SDSS** Feedback

Log In

Login Name

Password

log in

Forgot your password?

New user?

September 2008

Su	Mo	Tu	We	Th	Fr	Sa
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14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30				

GRAMYA VIKAS
Spatial Decision Support System

new

Step 1 Step 2 Step 3

1.1 Select Watershed Layer

☒ Upload Layer (.zip) ☐ Select Layer (.shp)

Browse...

1.2 Prioritization based on

☒ Upload Layer (.zip) ☐ Select Layer (.shp)

Browse...

Submit Reset

Watershed Delineiation / APRLP

Derive Layer

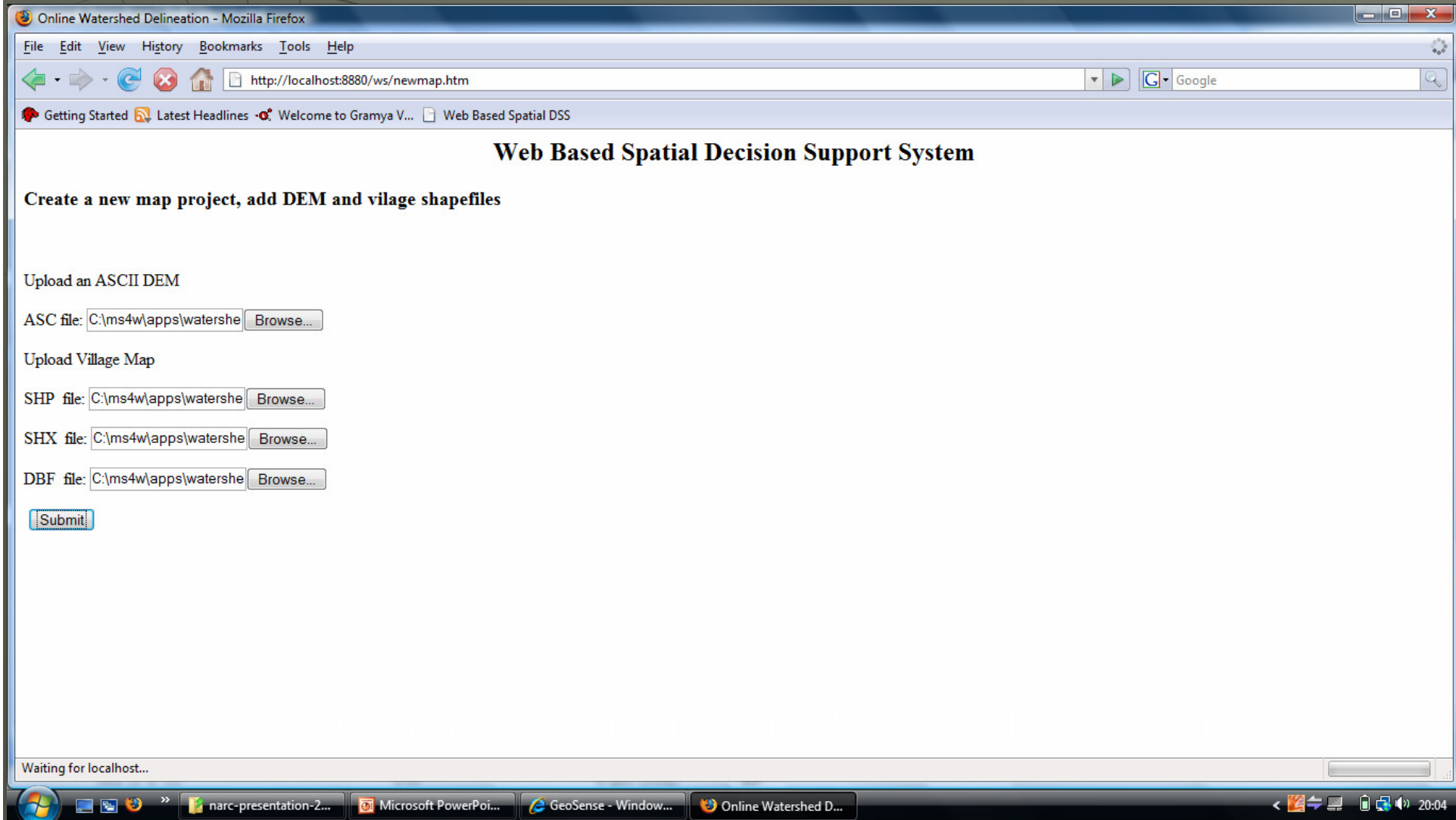
.. Status ..

SDSS Module for Watershed Management in GramyaVikas

Local intranet

Start data ActiveGrid IDE Spatial Decision Support ... Spatial Decision Supp...

8:22 PM





Gramya Vikas
RURAL DEVELOPMENT

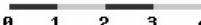
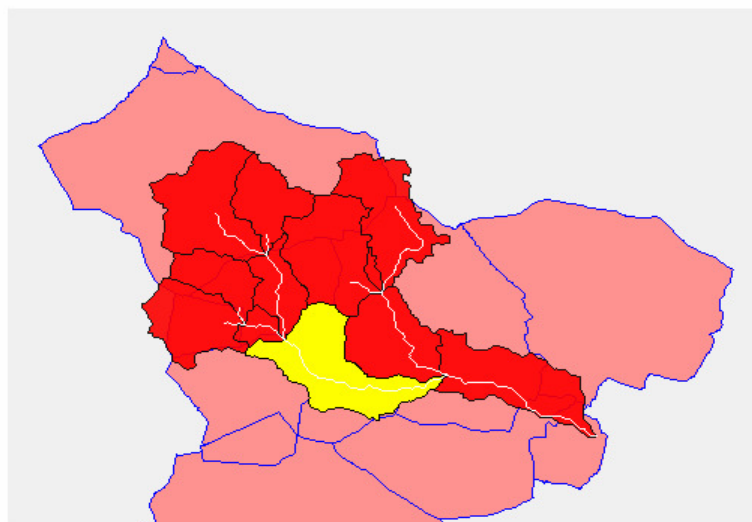
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Password

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September 2008						
Su	Mo	Tu	We	Th	Fr	Sa
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30				

Watershed Delineation Successful.**Click a watershed to see its area and perimeter or proceed to extract data for prioritization.**SCALE:  0 1 2 3 4 mi

Shape	Area	Perimeter
8	10812500	20334

Gramya Vikas for Automated Watershed Delineation

powered by PLONE

Done



Start



data

ActiveGrid IDE

Spatial Decision Support ...

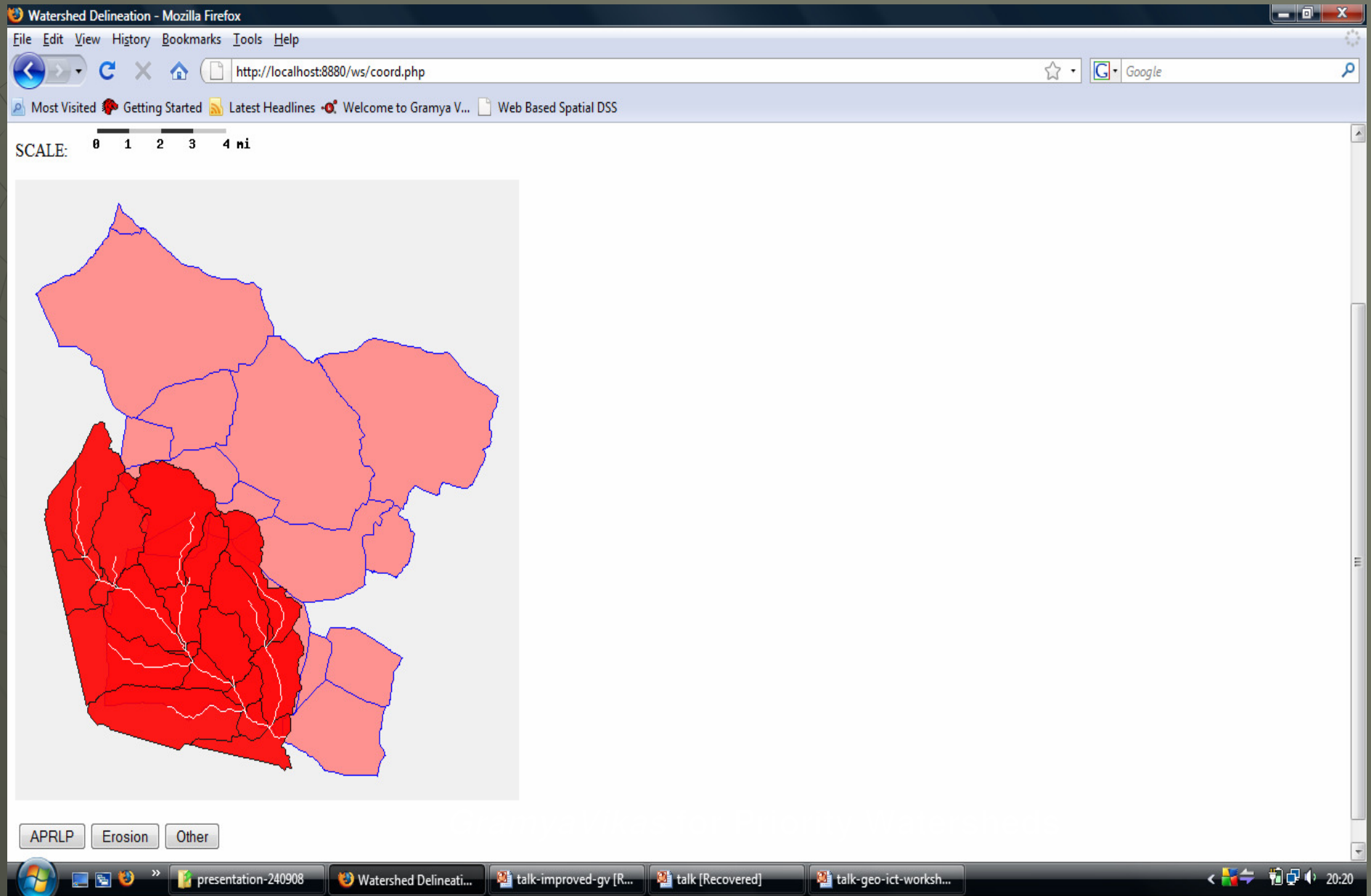
Spatial Decision Supp...

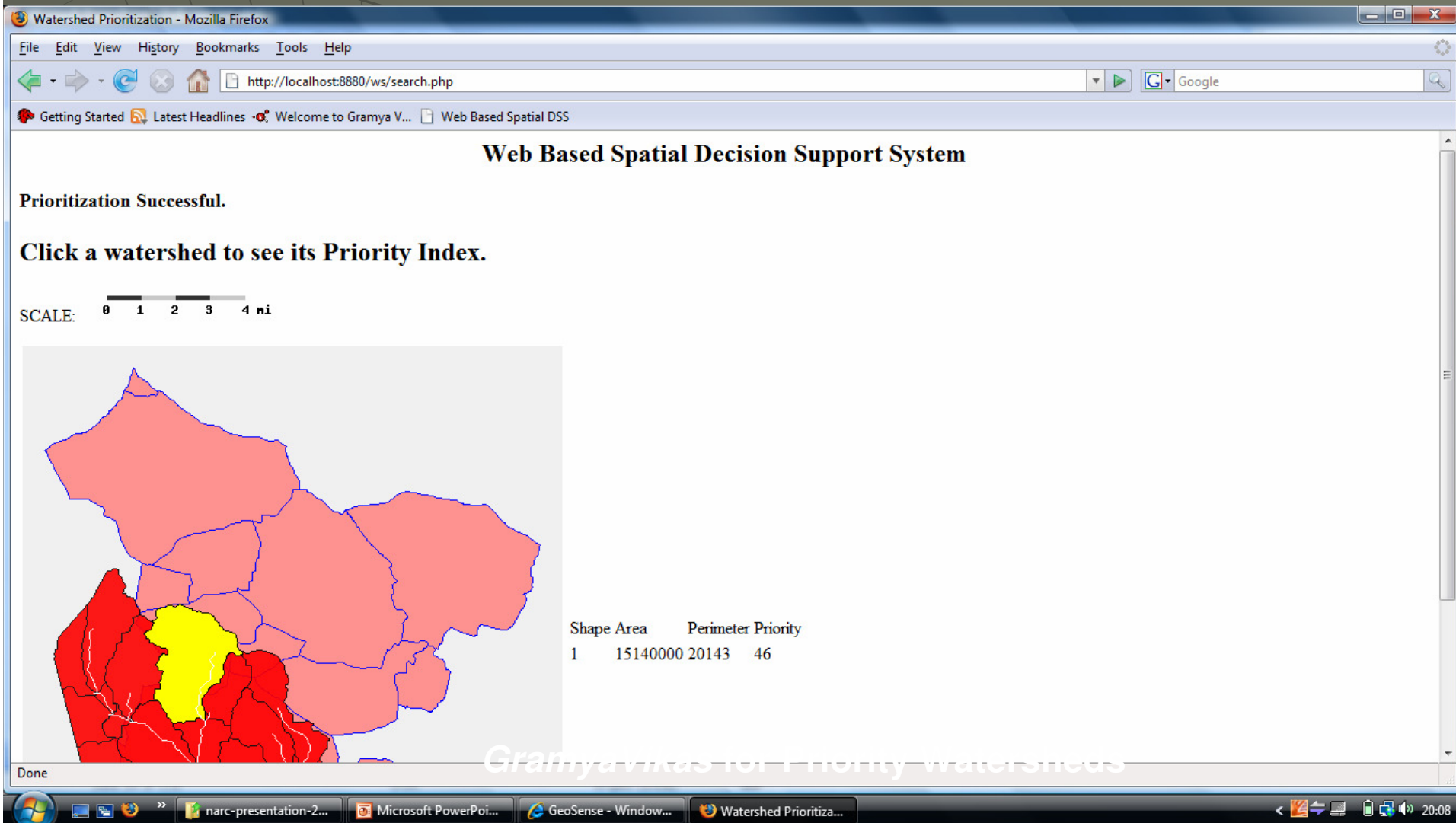
My Computer

Microsoft PowerPoint - [...]

<<

8:30 PM





Feedback

- ◆ A liaison between the user and the developer
- ◆ Users can communicate their comments, ideas about the system/data to the administrator



ग्राम्य विकास Gramya Vikas

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recent items

Welcome....
2006-11-04

More...

« March 2007 »

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					1	2
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

you are here: [home](#) » [easyguestbookentry.2007-03-16.0412814121](#)

contents view edit

add easyguestbookentry state: editable

EasyGuestbookEntry has been created.

Edit EasyGuestbookEntry

EasyGuestbookEntry

Name

Enter a value for Name

e-mail

Enter a value for e-mail

Hompag

Enter a value for Hompage

Message

Enter a value for Message

save

Remarks

- ◆ **A Geo-ICT system evolved from the Needs Analysis**
- ◆ **A suitable ICT tool for rural extension community in the districts for distributed collaboration**
- ◆ **A system which may give increased**
 - **flexibility / autonomy in decision-making**
 - **interconnectivity**
 - **new coordination/interaction styles between people/organizations**
- ◆ **Serve as an aid for online data assessment**
- ◆ **Improve the informatics culture in the districts**



GeoSense – a Future *GramyaVikas*

GeoSense

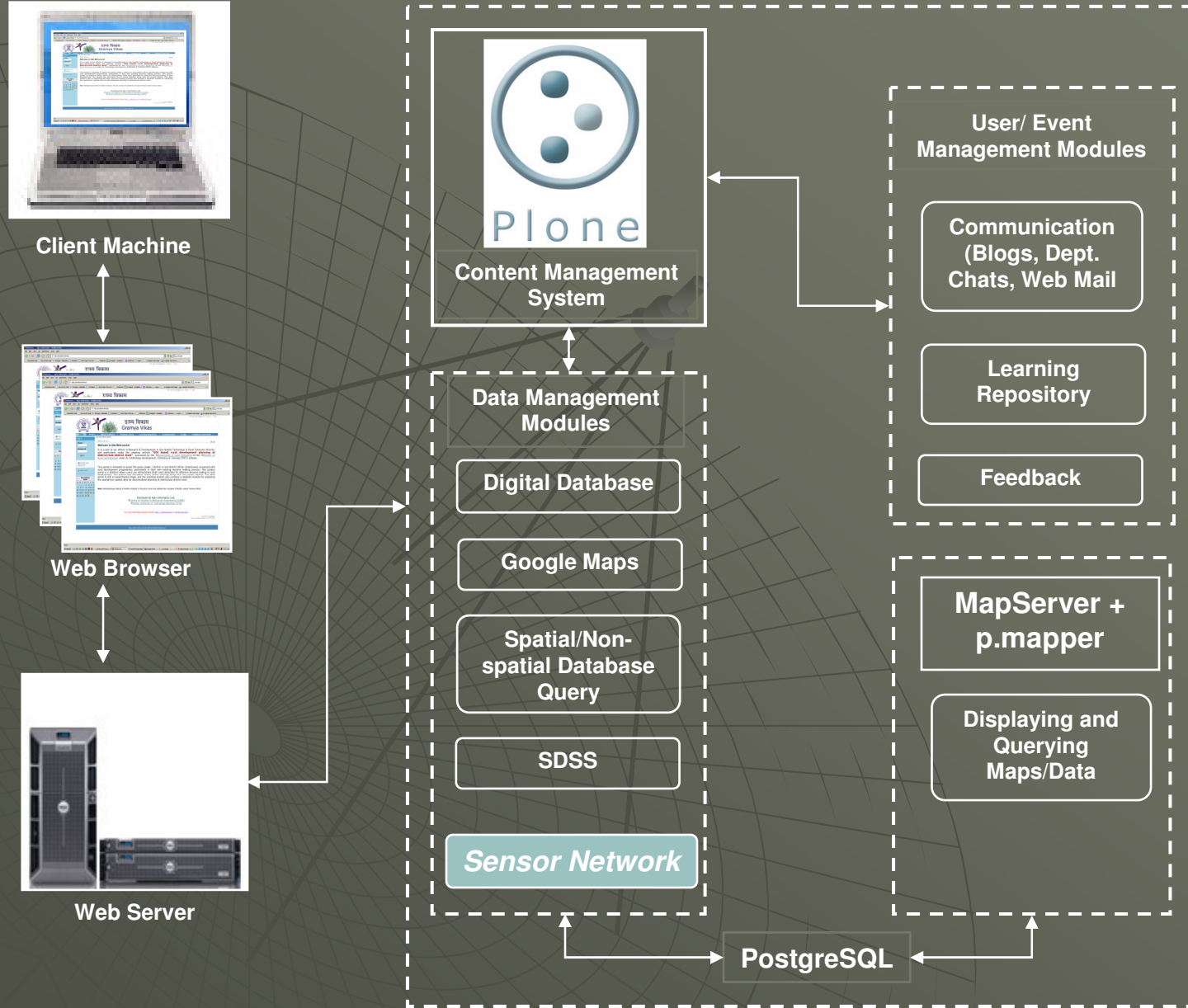
A Geo-ICT and Sensor Network based Decision Support System for Agriculture and Environment Assessment

**(Indo-Japan Joint Venture under
DST/JST Multidisciplinary ICT Programme)**



独立行政法人 農業・食品産業技術総合研究機構

<http://www.csre.iitb.ac.in/geosense>



Proposed GeoSense

Lessons Learnt / Experiences

- **Develop tool in conjunction with the user community**
- **Develop simple Spatial Data Infrastructures and assist the users in their own existing decision making processes**
- **Identify the clients / users – involve/train them**
- **Needs assessment**
- **Integrate Geo-ICT with Knowledge-based systems for easy technology transfer**