

Nagpur centre

Nagpur centre of Soil and Land Use Survey of India (SLUSI), is located in a very beautiful natural environment at Seminary Hills on Katol Road, Nagpur. This centre has the biggest area in comparison to other centres of SLUSI, is located in central India. The centre has three-storied building. The front portion of the ground floor is the administrative section. The Cartographic section and Remote Sensing laboratory are situated on the first floor of the front building. Field section existed on the same floor of the back side building. An Auditorium, lecture room, soil museum and soil laboratory are situated on the second floor.

There is a large courtyard adjoined with a small hill in front of the office building. A small stream comes down from the hill and flows at full force in the rainy season. A check dam is constructed to stop the water of the stream. Big trees of Ashok, nuts, mango, eucalyptus, Bauhinia and Subabool are planted over the hill. In the rainy season the office premises is covered with lush green trees and flowers and creates soothing effect to the mind.

Different types of soil survey are undertaken by the centre as per the guidelines of headquarter. These surveys include, Priority Delineation Survey, Soil Resources Mapping and Detail Soil Survey. The soil survey is based on scientific criteria of soil mapping and soil classification. Soil mapping units are classified and interpreted in various soil groups, which can be utilized for various purposes. The soil survey reports are generated after calculation of the area under different Soil Mapping Unites. These reports are utilised by state Governments for implementations of various developmental programmes.



NAGPUR CENTRE

FACILITIES

1. COMPUTER LAB :

1.	Hardware		
A.	Computers :		Quantity
	i.	HP Workstation	3
	ii.	HCL PC	3
	iii.	GPS	5
	iv.	HP PC	2
B.	Scanner and Digitizer :		
	i.	Ripro MSP Scanner	1
C.	Printers :		
	i.	Ripro MSP plotter	1
	ii.	Kyocera TASKalfa 1800	1
2.	Software :		
	i.	Arc GIS – 10.1	2 License (GIS Software)
	ii.	ERDAS Imagine – 9.3	1 License (Digital Image Analysis Software)
	iii.	Windows XP, Windows 98	7 Nos.
3.	Internet and LAN :		
	i.	BSNL Internet	
	ii.	All Workstation and PCs are connected through LAN	
4.	Projector :		1

2. REMOTE SENSING LAB :-

1.	Visual Interpretation :	a. Light tables for Image Interpretation b. Stereoscope for Aerial Photo interpretation.
2.	Digital Analysis / GIS	i. 3 HP Workstation ii. 1 Scanner (A0 size) iii. 1 Ripro MSP Scanner iv. 2 Arc GIS Software v. 1 ERDAS Imagine Software for Digital Image Analysis.



REMOTE SENSING & DIGITAL CARTOGRAPHIC LAB

3. PHOTO PROCESSING LABORATORY & PRINTING CELL:-

There is as such no Photo Processing Laboratory or Printing Cell in this Centre. However, Geo coded Imageries are printed with the help of Ripro MSP Scanner. Besides, technical reports are also printed with the help of Work Centre KYOCERA Task alfa machine.

4. SOIL LABORATORY:

This Centre is well equipped with Soil Laboratory for physical and physico-chemical analysis of soil samples. The instruments available in the Soil Laboratory are as follows:

Sl.No.	Name of the Instrument	Quantity
1.	Mechanical Shaker	24
2.	Oven (Electric)	2
3.	Centrifuge	1
4.	Gas Cylinder Oven	1
5.	Spectrophotometer	1
6.	Flame Photometer	1
7.	Conductivity Bridge	2
8.	pH meter	1
9.	Kjeldahl Distillation Plant	1
10.	Electrical Balance	3
11.	Chemical Balance	4
12.	Physical Balance	2
13.	Water bath	2
14.	Hot plate	1
15.	Pressure Plate Apparatus	1
16.	Mechanical Pipette	1
17.	Soil Hydrometer	1
18.	End to end vertical shaker	2
19.	LPG gas cylinders	2
20.	Soxhlet Extrection mentle	2
21.	Single glass distillation Unit	1
22.	High speed research Centrifuge R-24	1
23.	Centrifuge R-8C	1



SOIL LABORATORY

5. INFRASTRUCTURAL FACILITIES: CARTOGRAPHY GIS LAB

Sl. No.	Name of the Instruments	Purpose
1.	Optical Pantograph	<i>This machine required for enlargement and reduction of various scales of maps for publication of reports.</i>
2.	Lamination Machine	<i>Preservation & Archival purpose for long lasting of different types of reference and thematic maps.</i>
3.	Ammonia Machine	<i>For printing of maps for publication of reports and day to day use in Carto.GIS Labs.</i>
4.	Drafting Machine	<i>For easily accessible and handling the free size maps</i>

6. LIBRARY:

The Centre maintains a library containing selected reference books on soil science, soil survey, remote sensing and other allied disciplines. Copies of the Soil Survey Reports and Other Publications of SLUSI as well as those received from other central and state organizations are available in the library. Total number of reference books available in the library is 1236.

7. DOCUMENTATION AND USER SERVICES

The Centre publishes the results of various kinds of soil survey and special projects in the form of soil and land use survey reports and maps. Upto the year 2015-2016 **282** reports have been published by this Centre, out of which **199** reports of Detailed Soil Survey, **8** reports of Land Degradation Mapping, **2** reports of Soil Resource Mapping , **68** reports of Rapid Reconnaissance Survey and **5** report belongs to Sample Survey Project. The published reports of the Centre covers the area of Maharashtra, M.P. , Chhattisgarh, Telangana, Andhra Pradesh in the form of hard copy and is available since 1961. Abstracts of these reports are available on the website of SLUSI on free of cost.

Besides Special Project of *Soil resources Mapping* of all districts of *Madhya Pradesh* was completed by the Centre.

Collection Soil Sample and interpretation on *Vidarbha Region for Value Added Project Generation (Soil Moisture)* under *RISAT UP* Project

These reports are made available to the user agencies of states and central departments, agricultural universities/ institutions and related organizations for planning various developmental programmes on soil and water conservation, water management, farm level planning, land reclamation, etc.