

Environmental Information Centre

Introduction

Environmental Information Centre (EIC) is an initiative of Ministry of Environment and Forests (MoEF) set up to serve as a professionally managed clearinghouse of environmental information. EIC envisages meeting the environmental data needs of all stakeholders involved with Environmental Impact Assessment (EIA) in a systematic, efficient and effective manner. To operate EIC on a pilot basis and assess its commercial viability, MoEF has appointed Ecosmart India Limited (Ecosmart) as the project management consultant. The project is financed by the World Bank under the Environment Management Capacity Building (EMCB) project.

EIC has been in existence for past one year with offices operating in New Delhi and Mumbai. Currently operations are being consolidated in Delhi. During the first year of operation, a significant amount of quality environmental data has been collected with special reference to certain focal states. Some of the collected data has been statistically analyzed to understand the trends, checked for integrity and value added to useful formats by combining various layers of information. A sophisticated data validation, storage and retrieval system is currently being implemented. EIC has serviced clients to test the EIC concept and obtain feedback from the clients on the usefulness of the data provided. The feedback from the clients has been very positive. The second year's operational plan is being designed that will focus on expanding operations.

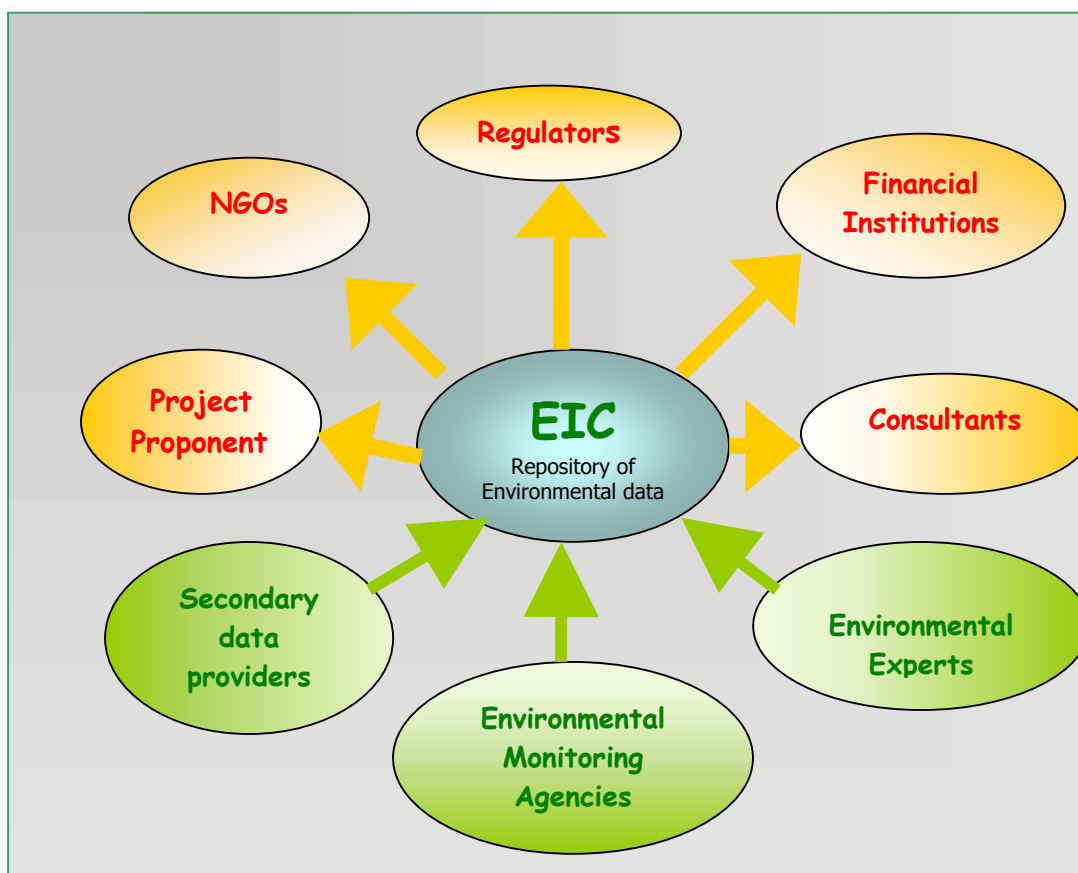
Sources of Data at EIC and Use

EIC collects environmental data from various sources including governmental agencies such as Central Pollution Control Board (CPCB), National Remote Sensing Agency (NRSA), Department of Ocean Development (DOD) and other literature available with various government departments, universities and environmental professionals. Selected data from EIA reports and Post Project Monitoring Reports submitted to MOEF also forms the data base for EIC. EIC has pooled the map based, textual and digital data in formats that is amenable to standard GIS (Geographical Information System) packages.

Finally, all the data collected by EIC is checked for integrity at various levels and value added before dissemination.

The EIC data can be used not only for the preparation of EIA reports but also to assist in the environmental decision making purposes by regulators, expert committee members and other stakeholders such as environmental NGOs.

The Figure Below Illustrates the EIC's Operational Network



EIC Data Products

EIC has developed quality environmental products related to environmental data with reference to pilot states of Gujarat, Andhra Pradesh and Maharashtra. EIC has also developed capability for providing customized data within a short period of time for other Indian states depending on the requirement of the user. The product list and short description of each of the product is given below.

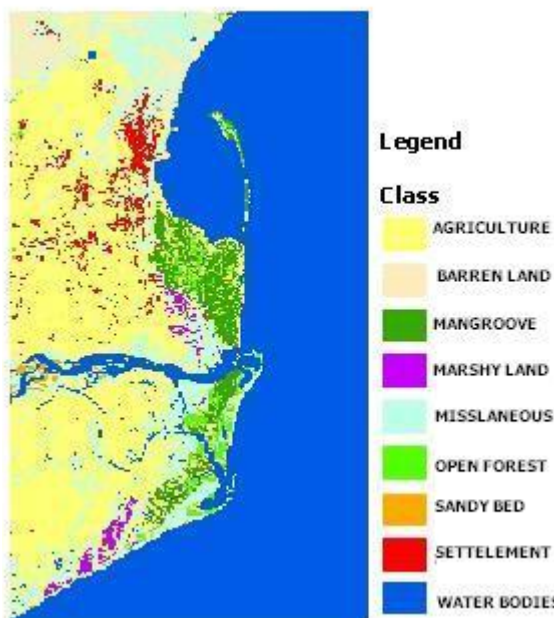
Standard Value Added Products on Digital Data Base

- Administrative Boundary and Infrastructure Data:** Digital data in WGS 84 format¹. This GIS data product provides the administrative boundaries up to Taluk level along with major infrastructures like roads, railway lines, settlements etc. are referenced from the topographical maps. This data is also attached with the latest available census information authenticated by the Registrar General of Census of India.

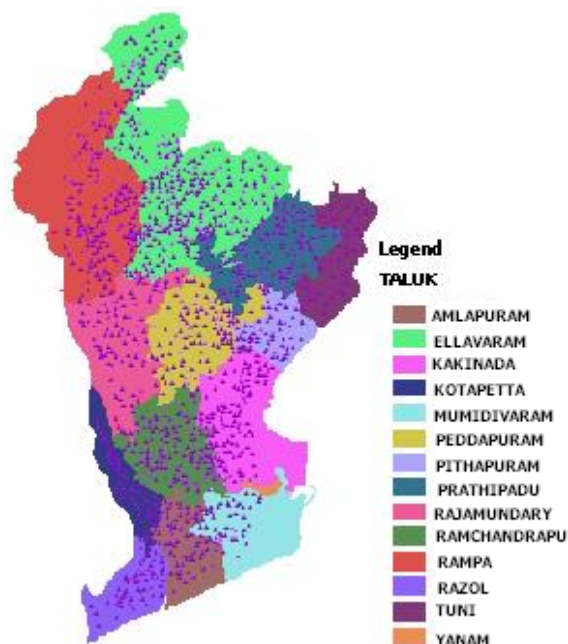
¹ WGS 84 format: World Geodetic System is a consistent global coordinate system which allows an unambiguous representation of positional information. Navigation solutions from the NAVSTAR Global Positioning System (GPS) and the Navy Navigation Satellite System (NNSS) are referred to this system.

- **Landuse/Land Cover Data:** Data products of inland and coastal land features of 22 classes interpreted through latest Remote Sensing Satellite imageries. Data is enriched with extensive ground truth verifications with expert supervision. The landuse maps can also be prepared using high resolution satellite imagery of spectral resolution up to 1 meter.

LAND USE/ LAND COVER DATA

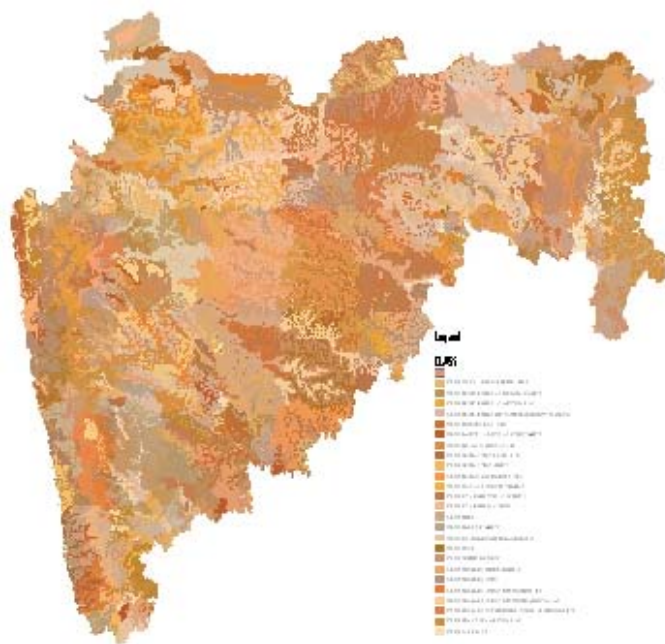
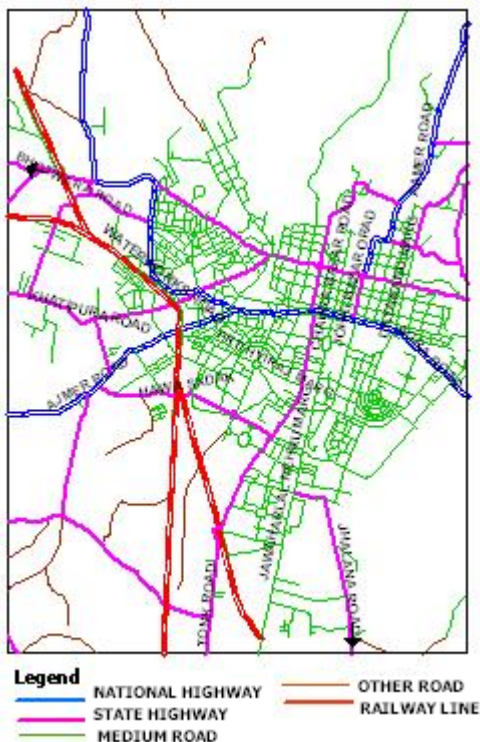


TALUK LEVEL VILLAGE LOCATION



- **Village Location/ Socio economic Data:** Data with all the villages marked as a point in the GIS platform with the latest available census data attached in the GIS data base format. The census data includes more than 250 tables giving details of types of houses, facilities in and around houses and villages, vulnerable population, literacy, occupational data, etc. Any customized data can be arranged through the Registrar General of Census.
- **Forest Map and Boundary:** Data on national parks, sanctuaries, biosphere reserves, forest classes, boundaries and density of vegetation. Satellite updated vegetation information like dense and open forests, scrubs, mangroves etc can be provided. Forest boundaries derived from 1:50,000 / 1:250,000 scale topographical maps with a layer of satellite update layer for forest status data are available. Boundary layer would depict reserved forests and protected forests.
- **Soil Characteristics:** Digitised soil maps attached with information on soil depth (very shallow, shallow, medium, deep and very deep), drainage (impeded, well drained and others), composition (calcareous, loamy, sandy, and others), erosion status (erodability), salinity and other soil associations, pedological classifications (ustochreps, chromusters and others)

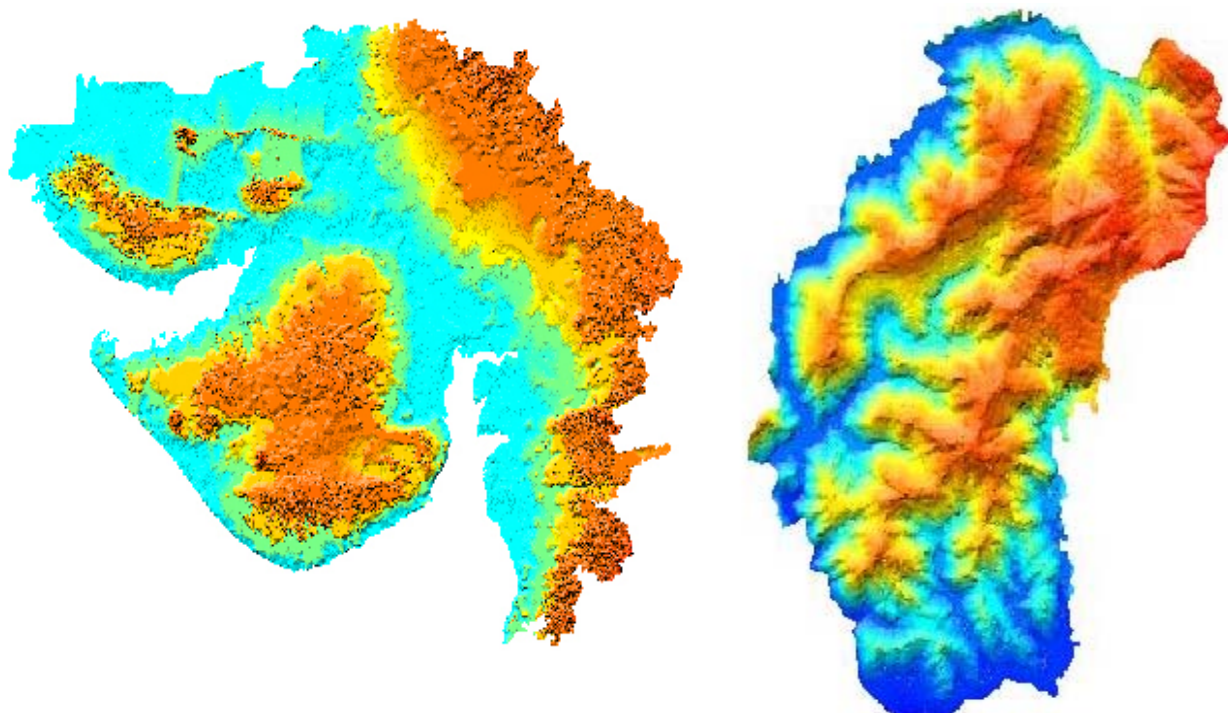
INFRASTRUCTURE LAYER



SOIL CHARACTERISTICS DATA

- **Marine Water Quality Data:** Data on physiochemical & biological categories. Data includes primary productivity, phytoplankton, zooplanktons, benthonic organisms, corals, mangroves.
- **Water Quality and Hydrology Data:** Data on surface and ground water on parameters of physical, chemical, organic, biological categories. Data is procured from Central Pollution Control Board (CPCB). The data on groundwater depth (DIW) and aquifer characteristics are available with EIC.
- **Air Quality Data:** Data on ambient air and meteorology including suspended particulate matter, NO_x , SO_x , wind speed, solar radiation, cloud height, wave height and others. Data is procured from Central Pollution Control Board (CPCB).
- **Archaeological Data:** Data on Archaeological Monuments and Archaeological Survey of India sites.
- **Geological Data:** Geological maps base giving details of rock types, stratigraphical sequences, major structural features and information on mineral deposits are available on an all India basis.
- **Ecology Data :** Data on rare, endangered, endemic, threatened, migratory species & flora and fauna and others.
- **Customized Data Products:** Data on ecologically vulnerable areas like cyclones, floods and earthquakes, Disaster Management Plans, Catchment Area Treatment for high erosion areas, Digital Terrain Models proving height, slope and aspect, irrigated areas showing agricultural cropping patterns and others.

DIGITAL TERRAIN MODEL (DTM)



Terms and Conditions for Data Supply and Use

The data will be supplied on agreement between EIC and the data user. The standard terms and conditions as applicable under various laws in India shall apply. The cost of the data and services will depend on nature of the data and services to be provided, its accuracy, shelf life and the levels of customization required.

For further information please contact:

Environmental Information Centre

Suite No.276, 278; Hotel Samrat

Kautilya Marg, Chanakyapuri

New Delhi 110 021

Tel : (011) 2412 2493/2494 Fax : (011) 2412 2490

Mobile : 9810502990 / 9810089929

Email : eicinfo@ecosmartindia.com