

Geographic Information Systems (GIS) at Lavasa

Lavasa is a hill town project being developed by HCC Real Estate Ltd, a 100 per cent subsidiary of HCC. Lavasa is easily accessible from Pune (approx 65kms) and is the first planned hill town, post independence.

Use of technology to establish new levels of world-class service and efficiency is intrinsic to the Lavasa vision. One such technology being used in the project is GIS. The system provides integrated, single window e-governance services to the citizens of Lavasa.

The GIS forms the core engine of Lavasa city's IT application portfolio. Lavasa will be the first city in Asia to operate in e-governance mode. GIS technology will be the backbone of the e-governance mode of the town. The entire landscape has been GIS / GPS mapped which will be linked to the document management system to offer high quality services such as logging complaints for any civic services, checking property related documentations and information on the events planned in the city besides the emergency alerts and disaster management system.

It currently provides geographically referenced data on the entire project, including

- Land use and town planning data
- Land acquisition status
- Physical progress of developmental activities (including all utilities) through color coded representation of completed, in process and planned works
- Environment and tourism related data
- Slope stability data

GIS, in this avatar, works as a visual representation tool for conveying the physical progress of the project at different levels of detail. This is also the most efficient way to collect the data, rather than attempting to recreate historical data post facto, once city operations start.

In subsequent phases, this base data would form the basis of e-governance that will include utility operation systems, sales and CRM systems, billing and collection systems, various citizen service applications (tax collections, route mapping etc.) as well as support decision making tools such as simulation maps.

Technology behind the scenes: MFN

The **Master Facilitation Network (MFN)** is a PERT/CPM network of about 3,000 activities which shows the dependencies between various construction and non-construction tasks. This is used for identifying points of coordination with non-construction teams such as Sales, Marketing, Approvals, Land Acquisition, Estate Management etc. The system allows reporting on the basis of specific business goals (all activities within a specific date interval that contribute to the achievement of the business goal) and progress on each such activity (scheduled dates, current progress, expected completion date etc.).