



## Precision Mapping for Hi-Tech City Of Lavasa

LAVASA is a planned hill town developed by Lavasa Corporation, an HCC Group Company. Situated at 65 kilometers from Pune and 200 kilometers from Mumbai, it comprises of 7 towns providing eco-friendly residential and work environments.

Lavasa envisions the use of state of the art Geographic Information Systems (GIS) to offer world class services and improve efficiency in managing the townships and providing integrated e-governance services to the citizens.

The company required to carry out a detailed topographical survey of the project area and generate high accuracy contours and terrain models of the city. The baseline data needed to be highly accurate as it was a precursor to analyze ground situation for expansion of roads.

GIS expert Genesys, proposed the use of cutting edge LiDAR – Mobile (MLS) & Terrestrial Laser Survey (TLS) for acquiring accurate topographical data to meet the expectations of the accuracy standards. The acquired MLS/TLS data - supplemented with high resolution panoramic imagery – resulted in a GIS data set that surpassed project requirements empowering both town designers and town constructors in their decision making and execution abilities.

The high accuracy data enabled in geospatial engineering investigation to deduce area, volumetric analysis, slope measurements and prepare long section and cross section drawings.

Conducting the survey in the hilly terrain with dense vegetation required special skills to filter the low vegetation from high vegetation.

**Key benefits:**

- Better project cost and time estimation
- Checking project feasibility on the fly
- Cost effective solution to re-conduct the survey in future