

## Parcel Mapping for Land Record Using Drone Captured Aerial Imagery

The Government of Punjab has made the decision to initiate the Punjab Urban Land System Enhancement (PULSE) Project. In collaboration with the World Bank, the Board of Revenue in Punjab is in the process of formulating the PULSE project. This initiative aims to establish a comprehensive central database encompassing all categories of urban properties, including those managed by societies, authorities, and development agencies. It goes beyond a simple Geographic Information System (GIS) and parcel-based system, offering a wide range of functionalities to serve as a robust foundation for creating a 'Spatial Data Infrastructure' (SDI), which is an essential requirement for the future.

The primary goal of this project is to provide a complete and transparent record of land and immovable property ownership. Furthermore, it includes the digitization of remaining rural land areas, the digital transformation of katchi abadi records, and the automation of sub-registrar record rooms as integral components of the project.





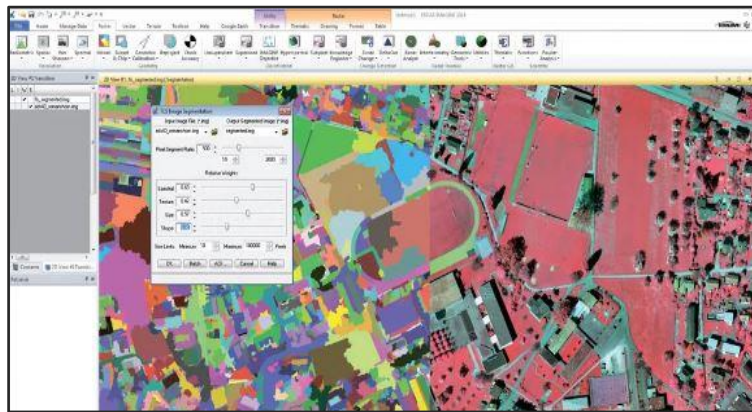
## Digital Ortho Imagery

- ❖ 3~5 cm Spatial Resolution
- ❖ Vertical (nadir) or near-vertical angle.
- ❖ Georeferenced with Established Geodetic Network
- ❖ More than 16 bits/pixel radiometric resolution depth
- ❖ Color balanced image
- ❖ Seamless and mosaiced



## Digital Surface Model (DSM)

- ❖ Spatial Resolution of 15cm



## GIS Mapping

- ❖ Digitization and GIS Mapping to delineate the boundaries of each property units using high resolution aerial imagery.
- ❖ Marking of all features by polygon and line features classes, with their attributes table. E.g., roads, buildings etc.

