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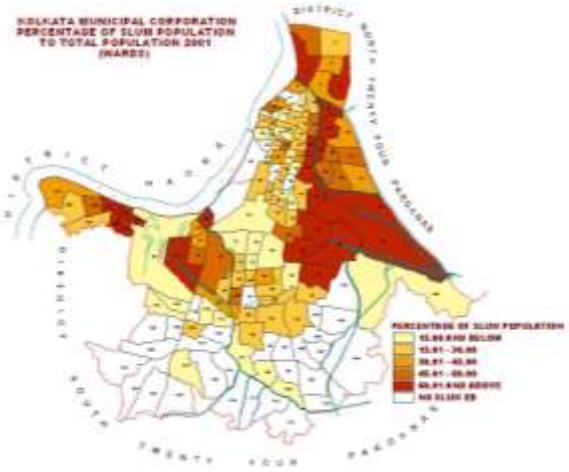
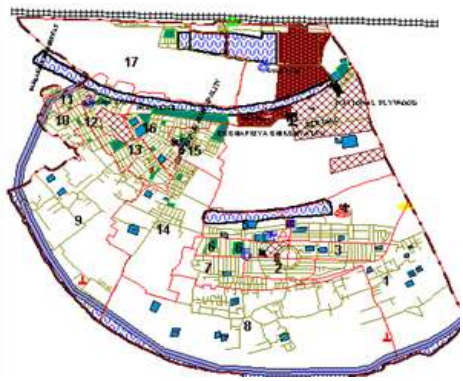
THE POWER OF WE

GIS Survey Works and Map Preparation in Urban Local Bodies under Kolkata Urban Services for Poor (KUSP)

GIS Survey work has been implemented in 41 Urban Local Bodies of West Bengal with the objective of collection of the Household level details for Tax assessment and Tax management for revenue enhancement.Change Management Unit (CMU), set up under Municipal Affairs Department (MAD) for managing KUSP has proposed to equip the ULBs with Geographic Information System (GIS) that comprise of digitized base map, Database that has linkage to geographic elements of the base map, Processes that ensure updating of both base map and database and Analytical and report generating tools to make use of the data in urban planning and governance with customized software.





CLIENT: Kolkata Urban Services for the Poor

LOCATION: India

CLIENT DESCRIPTION:

Government of West Bengal and DFID in 2003 agreed to collaborate on the development of the 'Kolkata Urban Services for the Poor' (KUSP) programme aimed at, improving urban planning and governance, access to basic services for the poor and promoting economic growth in Kolkata Metropolitan Area (KMA). The programme intends to cover all the Urban Local Bodies (In short – ULBs, i.e., Municipal Corporations or Municipalities) under Kolkata Metropolitan Area (KMA) except Kolkata Municipal Corporation totaling 40 ULBs.

Vayam Technologies Limited had been empanelled by the Change Management Unit (CMU) set up under Municipal Affairs Department (MAD) to carry out the GIS Survey work for the municipalities of Kanchrapara, Gayeshpur, Halishahar and Kalyani.

CHALLENGES

Municipalities in India are plagued by the acute problem of low tax generation, as they are unaware of "What Lies where?" It is a huge task to manage Property Tax, Birth and Death Registration, Socio Economic Data management and Holding registration.

GIS technology comes to rescue the mess in municipalities through its power of visualization and linking of various records. In GIS, the database possesses attributes of each individual property with information such as land owner, co-owner, mailing & permanent address, house style, built year, individual room measurements, compliance with the regulations of the building authorities, public/private utilities mapping to the plot, street characteristics and amenities. There can also be a provision of linking each individual plots with their digital photographs, and a link to the Map showing the location of the plot.

SCOPE

- Remapping of the Municipalities' maps including the mapping of railway colonies.
- Updation of the map for new layers.
- Gathering of existing data from ULBs.
- Infrastructure, baseline, property and contract survey in the municipality
- Incorporation of the Survey data in the base map.
- Migration of existing data
- Data Entry
- Data Cleansing and validation

TECHNOLOGY

- Image Processing Software: Erdas Imagine
- Vector Data Preparation, Reporting: Map Info 6.5

BENEFITS TO THE CLIENT

- The Survey data collected from the Household level has details for Tax assessment and Tax management for revenue enhancement.
- The Household survey involves the socio-economic details of the households, which serves as a basis for Municipal Information System.
- It also includes the survey of slums which will improve the decision making for the service provision in slums.
- The entire survey data will be linked to GIS for Spatial Decision support system as GIS provides information on what is where, in relation to what, like proximity, the trend of change, the pattern of existence and scope of future planning in terms of "What if?"
- Urban Infrastructure planning and development and analysis for the future infrastructure is the major advantage of having a Municipal GIS system in place. The generation of Thematic map/zoning map created a high visual impact and is used for assessment of several sectors such as for water network planning, property mapping by assessor, maintenance of cities and civic amenities services, etc.
- The updated spatial and non-spatial database on the Municipal GIS system helps the concerned Municipality to export and generate the maps and also print them for any specific usage by the concerned field officer, or the property owner at any point of time thereby saving huge cost and time.

REPLICATION

The same application may be replicated for developing any MIS, Monitoring and Evaluation and GIS-based information system.