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Transforming Property Valuation Practices with GIS: A Detailed Examination of the Tamil Nadu GIS Viewer

Introduction

In real estate, everything starts with valuation. Whether you're buying, selling, or seeking a loan, the process depends on correctly identifying the exact piece of land that's under discussion. That sounds simple, but in practice, it has been a recurring challenge. Errors in identifying boundaries or ownership don't just delay work — they can cause serious financial losses and sometimes drag people into long-running disputes.

To tackle this, Tamil Nadu Government has introduced a digital solution. The Tamil Nadu GIS Viewer (TN GIS Viewer), developed by the e-Governance Agency (TNeGA), makes detailed geographic and land-related information accessible in one place. What used to involve multiple visits to government offices can now be done within a few clicks. This paper takes a closer look at how the TN GIS Viewer is changing property valuation practices and why valuers in the state increasingly depend on it for accuracy.

How to Access and Use the TN GIS Viewer?

Access the Portal:

The tool is available online and doesn't need any extra software. You just open a browser and visit **https://tngis.tn.gov.in/apps/gi_viewer/.**

Exploring the Map:

Once inside, the screen displays a detailed map of Tamil Nadu. Users can **zoom in, move across districts, or narrow down** to villages. The interface feels similar to common map applications, so it doesn't take long to get used to.

GPS on Hover:

As you move the cursor, the exact latitude and longitude of that point show up instantly at the bottom. For a valuer, this small but powerful feature is invaluable, because it ties the digital map to precise ground locations.

Layers in the Map:

The map isn't just a single flat image. It allows you to overlay different layers:

- **Base Maps:** Street Maps, Terrain, or Satellite imagery.
- **Thematic Layers:** Topography, Demographics, or Resource-based maps.
- **Land and Administrative Data:** District boundaries, Transportation networks, CRZ zones, and more

Main Features of TN GIS Viewer

Filters for Quick Search:

The system includes filters to make pinpointing properties easier. In urban areas, you can narrow searches by ward, block, or survey numbers. In rural areas, filters go a step further to subdivision level. This minimizes confusion when there are multiple plots with similar survey details.

Information on Land Parcels:

Clicking on a specific site provides a host of details, such as:

- **Patta/Chitta (A-Register):** details of ownership.
- **FMB Sketch:** boundary layouts.
- **GPS Coordinates:** precise corner points.
- **Guideline Value:** government's assessed rate.
- **Encumbrance Certificate:** legal claims or mortgages, if any. Jurisdictional Boundaries.

This single-window access to official records helps valuers avoid the delays of chasing multiple offices for the same information.

Exporting and Printing:

Maps and related data can be exported as an image or PDF. This makes it convenient for valuers when preparing reports or submitting documents in official formats.

How It Improves Valuation Practices?

Better Accuracy:

Property valuations are only as good as the accuracy of identification. The Viewer ensures that valuers can cross-check survey numbers, GPS locations, and FMB sketches on one platform, cutting down errors that often happen in traditional methods.

Fewer Errors in Rural Areas:

In villages, where land documents are often incomplete, the Viewer's ability to show updated GPS coordinates and sketches is particularly useful. It provides clarity where older record books leave gaps.

Time and Cost Savings:

Instead of visiting multiple government offices, valuers can fetch all key data online. This cuts overall time from weeks to days — sometimes even hours — and helps keep costs lower for clients.

Transparency and Trust:

Since the data comes directly from a government-backed source, it inspires trust. Both buyers and sellers can rely on the same set of facts, reducing disputes.

What Could Come Next?

While the TN GIS Viewer is already strong, a few improvements could make it even better:

- **Linking Sale Transaction Data:** If real-time market transactions were included, it would allow valuations to reflect both official guideline values and actual trends.
- **Mobile App Version:** A lightweight app would let valuers check details during a field visit itself.
- **Multi-Language Interface:** Having Tamil or other regional languages available would make the tool usable for a much wider audience.

Conclusion

The TN GIS Viewer is proving to be a practical, time-saving tool for property valuation in Tamil Nadu. It brings together ownership details, FMB sketches, jurisdictional boundaries, and GPS accuracy under one roof. By reducing errors, saving time, and creating transparency, the platform places valuers in a stronger position to deliver precise and trusted reports.

As technology moves forward, with additions like transaction data and a mobile interface, the Viewer could become even more central to the way valuation is done in the state. For now, it stands as an essential step toward modernizing a process that affects a large section of Tamil Nadu's population.