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**CADASTRAL INDEX MAPPING OF TEMPLE LANDS  
UDUNUWARA DIVISIONAL SECRETARY DIVISION**

A PROJECT REPORT PRESENTED BY

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# **CADASTRAL INDEX MAPPING OF TEMPLE LANDS UDUNUWARA DIVISIONAL SECRETARY DIVISION**

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## **Abstract**

A Cadastre is normally a parcel based and up to date land information system containing a record of interests in land such as rights, restrictions, and responsibilities. It usually includes a geometric description of land parcels linked to other records describing the nature of the interests, and ownership or control of those interests, and often the value of the parcel and its improvements. It may be established for fiscal purpose, legal purposes to assist in the management of land and land use.

An accuracy standard of the cadastre is one of the necessary conditions for the operation of the cadastre. In cadastral surveys, boundary of land parcels should be surveyed and recorded without any ambiguity. The limits of unambiguity are hard to define because no system or method has ever been able to give exact coordinates or locations of the boundary points. However, if there is no specific guarantee to the coordinates of boundary points of land parcel, the validity of the cadastre will be diminished. Therefore, it is necessary to give a guarantee to the coordinates of the boundary points with certain accuracy. So no client will suffer from its errors.

Cadastral surveying involves identification, demarcation, measuring and mapping of new or changed legal parcel boundaries. It usually includes the process of re- establishing lost boundaries and sometimes resolving disputes over boundaries or other interests in real property. In Sri Lanka the major problem of cadastral surveying is identification and demarcation of very old title plan boundaries that belong to a Vihara or Devala.

In this task, the main objective is to identify the Viharagam and Devalagam lands and private lands in an area more accurately before starting cadastral mapping. At present these lands are mostly encroached and misused by the people due to the loop holes in the traditional system of land registration.

Before cadastral mapping, old data such as revenue plans, deeds, and other acceptable documents must be collected and made use to the preparation of index map. The system can be done by digitizing old revenue plans and village boundaries and overlaid using GIS software like Arc map. By clipping village areas, the cadastral index map can be prepared. This map includes old title plans belong to Vihara or Dewala and private lands.

Extracting co-ordinates of old title plan boundaries is done by using Geo Interopreability tool in GIS software. The area of title plan within the village will be calculated using GIS operation and marked with the cadastral index map. Thus, this system will leads to prepare a accurate cadastral map without loosing Vihara and Devalagama lands.