

**DEVELOPMENT OF GIS BASED DIVISIONAL SPATIAL DECISION SUPPORT
SYSTEM TO NALLUR DIVISIONAL SECRETARIAT IN JAFFNA DISTRICT**

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A Decision Support System is an interactive computer based system or subsystem planned to help decision makers use communications technologies, data, documents, knowledge and/or models to identify and solve problems, complete decision process tasks, and make efficient decisions. Decision Support System is a general term for any computer application that enhances a person or group's ability to make decisions. Also Decision Support Systems refers to an academic field of research that involves designing and studying Decision Support Systems in their context of use. And it allows a decision maker to build relationships both spatial and non-spatial, between different types of data, merge multiple data layers into information, weigh outcomes from potentially competing alternatives, and forecast.

This study evaluates the use of Develop Divisional Spatial Decision Support System for a Divisional Secretary in Sri Lanka using GIS techniques. The Divisional Secretariat System and the Pradeshiya Sabhas are the two main rural institutions operating at the Divisional level in Sri Lanka. This project analyses the developing a Divisional Spatial Decision Support System, how it helps the secretary to make effective and efficient decision making special reference to Nallur Division at Jaffna District in Sri Lanka.

Basically researcher gathered primary data by the field surveys, questionnaires and interviews to key informants at Nallur Divisional Secretariat (DS). And secondary data by Statistical Hand book in Divisional Secretary and collected data from District Disaster Management Unit. The data were analyzed by using GIS techniques, relevant models and tools. The questionnaires have been summarized into the table, linked with Divisional spatial data and the results have been shown in maps. The most popular GIS software Arc Map 10 is used for all spatial analysis purposes.

The project found out that developing a Spatial Decision Support System using GIS for successful and effective divisional management. It was found out that interrelationships between spatial decision makings and capable of the GIS based support system. Most of the Divisional Secretary's final decisions are made using paper based information systems.

This project was conducted within a time constraints. Due to this time constraints it was very difficult to carry out an in depth study. It is suggested to further detail study about decision support system and its usefulness for Divisional Spatial Decision Support System in Sri Lanka, because this research has considered a limited survey and therefore the results also were limited in its fullness in applications.