A review on Geographical Information System (GIS) in town planning: Malaysia experience

Abstract

Development growth in most developing countries has become one of the issues, as rapid planning process can no longer be controlled. Planning process is a widely accepted way to handle complex problems of resource allocation and decision making. Apparently, the planning system has an important role in managing and controlling the development trends. In Malaysia, to control, monitor and planning systematically town, the method used is development plan preparation method and urban development monitoring and the blue print method. However, the process has changed and planning process have to faced with complex town problems due to rapid development of the country. The rapid town development due to increasing population and economic growth have to faced an uncontrolled planning process and takes a long time to complete the process. Hence, to overcome the town planning problem by implementation Geographical Information System [GIS] as the main tool in plan making operations. GIS is able to support the town planning process in capable of input, storage, manipulation, analysis of data useful in planning, decision making and implementation. It is a powerful tool which helps the user to view the different scenarios so that the best strategy may be choosen for planning development. The use of GIS in town planning can develop database for the both data which attribute and spatial data. From that, it can generate planning needs analysis according to the Town and Country Planning Department. Therefore, this paper discusses the use of GIS in town planning. This paper will also highlight on how GIS is applied for town planning process in Malaysia level. The findings showed the implementation of GIS in town planning can improve the result based on quality of town planning process, saving time and costs and data can be obtained faster.