

# **GIS BASED LANDED PROPERTY VALUATION MODEL WITH SPECIAL REFERENCE TO EXTERNAL FACTORS OF THE COMPARATIVE METHOD OF VALUATION**

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Sri Lanka is consisting about 65,610 sq km of extent with 870 sq km of inland water bodies. 30% of hereby are converted in to industrial, commercial and residential purposes within last decade by people's activities.

The main factor which is affected to the land use changes can be identified as urbanization after the industrial revolution in Sri Lanka and the economic conversion after 1970's. When compare with early records, the population indicators imply the change of land use, demand and urbanization patterns in Sri Lanka.

The landed properties are used for varies economical activities and therefore, the values of the lands are having dissimilarities. Land value depends on many factors affect to the land demand and most factors are location base. Extensive changes of these factors may affect directly to the land market and some peripheral changes make slight variations.

Land valuation is the process of assessing the distinctiveness of a given piece of land. The process may be described as a carefully considered estimate of the worth of landed property based on experience and judgment. Hence the purpose of land valuation is to determine market value or benefit value. Basically the value is fundamentally determined by its location and it is one of the main decision making tools that is used to manage different aspects of the economic activities. Therefore, spatial factors are extremely significant in decision making of land valuation. However there are certain issues of these conventional systems of property valuation which are handled manually, These processes are time consuming, There is repetition of work, and most importantly these are based on a non-standardized system of obtaining information that causes errors and variations in the property values. Geographical Information System (GIS) is a more facilitated computer based tool for mapping and analyzing things that exist and events that happen on earth. Therefore, it can be easily applied for decision making process in the land. In this paper, it is intended to introduce a specific model for land valuation process. This model develops a method for nominal asset land valuation. It considers the real-market prices, based on qualitative and quantitative characteristics of individual land properties. To determine the value of a land, some land valuation criteria are selected and formulated. These property values are assigned by the numerical parameters rather than real-market values. These parameters are derived from a combination of the selected land valuation factors that can be spatially analyzed by using GIS. Land value can then be determined as a single unit figure that represents all factors affecting the land as compared to others. As a result, a visual land valuation model is created which will be readily understood by individuals unfamiliar with appraisal professionals.