A VALUATION MODEL TO DERIVE LAND PRICES IN SRI LANKA

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Abstract

Real Estate is known to be a scarce resource in the modern world. Lands which can be categorized as a subset of real estate refers to the area on earth which people use to build buildings for residential or business use. With the drastically increasing population and infrastructure development, lands and their availability are drastically reducing. The supply of land as a resource is generally below that of the demand for lands. Hence public are ready to pay higher amounts to buy lands.

This study focuses on developing a theoretical model for valuation of lands based on each land's significant factors. Simple Linear Regression was used to understand the relationship between the price of lands and the variability if significant factors. Then Multiple Linear Regression was used to build a linear model to value the lands.

Data from an online web portal and a public survey was used to train and build the model. Due to many dimensions being available, a linearity check was conducted to select the most correlated factors out of the group of factors collected. A descriptive study was done in parallel to understand the distribution of data in the variables.

The multiple linear regression model was trained using the reduced dimensions and an equation was formed which derives the price of a land when the values for variables were given.

The model trained showed a considerable RMSE value.