

Producing a Land Valuation Map with GIS Using Nominal Asset Land Valuation Method: Case Study of Trabzon Province, Turkey

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SUMMARY

Land valuation has emerged as a result of the need to determine the cost of a land objectively and impartially. Satisfying of the need to accurately estimate the value of the land, it is possible to objectively evaluate and analyze the data used. In this context, many methods have been developed to determine the land valuation. Nominal asset land valuation method is one of the most important land valuation methods; it helps to provide more consistent information about the land in an accurate and fair way by using its environmental conditions, physical characteristics and relations with social-cultural centers. Besides being important this method, it is also important to process spatial and non-spatial data, to manage and organize the process, and to do all of this through an information system. Geographic Information Systems (GIS) is an important information technology that enables this process management to be performed in the most appropriate way. GIS as well as in many areas allows the realization of land valuation.

In this study, using the Nominal Asset Land Valuation Method, the land values located in a pilot area selected in the Kirechane neighborhood of Ortahisar district of Trabzon will be determined simultaneously and land value map will produced by using Geographic Information Systems (GIS). The fact that the Kirechane neighborhood in Ortahisar, Trabzon, developed rapidly between the years 2017-2018, and the rapid construction of the city in this region was effective in the selection of this region. In this study, factors such as proximity to the health center, religious facility, educational facility, slope, aspect, view, proximity to the residential center, proximity to the highway, land cover and parcel break points were chosen to be used as the main criteria for land valuation with nominal values. All these factors were weighted by nominal asset land valuation method and pixel based land value map was produced by using GIS. Finally, taking into account the purchase- sale values determined based on market conditions, the approximate value of each land has been determined.

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