

APPLICATION OF GIS TECHNOLOGY AND AHP ANALYSIS IN LAND VALUE ZONING FOR URBAN AREAS OF LONG BIEN DISTRICT, HANOI CITY

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Summary

The objective of this study is to integrate Geographic Information System (GIS) and Analytic Hierarchy Process (AHP) for zoning land value in Long Bien district, Hanoi city. The four main factors used to analyze the non-agricultural land value in urban areas are: accessibility, transport, environment and socio-economic status. Based on the AHP technique, we calculate the weights of the factors, then overlay the data layers to create the land values by applying GIS. The results show that the land value in the study area are divided into 7 different sub-areas. Verification of the reliability between the results of zoning and actual land prices by correlation analysis shows that there is a close relationship between the two variables, with correlation coefficient r of 0.825. The results demonstrate the usefulness of integrating GIS and AHP in land value zoning, providing reference material for land price management in the study area.

Keywords: *AHP, GIS, land value, zoning.*