

# **Spatial Characteristics of the Cultivated Land Resource Multi-value and its Spatially Non-stationary Relationships with Impact Factors□A Case Study in Tuanfeng County, China**

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**Key words:** Cultivated land value; multi-scale; spatial characteristics; statistical analysis, Tuanfeng County

## **SUMMARY**

Comprehensive cognition of characteristics of cultivated land multi-value and its spatial statistical analysis is an important prerequisite to promote the urban-rural land market construction, and it can also provide decision supports for coordinating rural and urban development. In this study, evaluation system of prefectural cultivated land multi-value was built. And taking the Tuanfeng county in China as an example, we evaluated the economic, social and ecological value of prefectural cultivated land resources, and analyzed its spatial characteristics at village, town and county regional scales, and explored the effects of various factors on prefectural cultivated land value based on Geographically Weighted Regression (GWR) method. The results indicate that: (1)the proportion of cultivated land resources ecological, social and economic value in this study area is approximately 5:3:2, and the comprehensive value is up to 462.72 yuan/m<sup>2</sup>, which is 8.8 times over the current land expropriation compensation standards; (2)The southern prefectural cultivated land resources' economy and ecological value is higher than it in north, which mainly because of the topographic conditions. And there is an obvious agglomeration effect of cultivated land resources value in local parts, while the cultivated land social value of some individual villages was abnormal. (3)The comprehensive value is closely related to location and traffic conditions of cultivated land. And the cultivation behavior of farmers has a direct impact on the cultivated land quality and value promotion. Above all, the research of cultivated land value at multi-scale can provide scientific supports and effective reference for the local decision-making departments, to reveal the formation mechanism of cultivated land price, and facilitate the construction of urban-rural integral land market. And the GWR model can be used to effectively estimate the regional differences of impact on cultivated land value by each factor which will provide advice to promote the cultivated land resources values.

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