

林地生态产能评价——以河南省为例

刘秉瑞¹, 钱家乘¹, 冯喆¹, 吴克宁^{1,2,*}

(1. 中国地质大学(北京)土地科学技术学院, 北京 100083;

2. 自然资源部土地整治重点实验室, 北京 100035;)

摘要: 研究目的: 科学评价自然资源生态产品的生产能力, 是开展自然资源清查、国土空间规划的重要前提, 有助于生态产品价值实现。研究方法: 空间自相关分析、综合加权评价法。研究结果: (1) 基于生态产品生产能力内涵, 构建了基于“环境背景—植被状况—人类压力—人类投入”的生态产品生产能力评价框架; (2) 河南省林地生态产品生产能力均值为 0.341, 豫南和豫西山区生态产品生产能力较高、豫北和平原区林地生态产能较低; (3) 河南省林地生态产品生产能力的空间分异受到空间关联性的影响, 全局莫兰指数为 0.7。研究结论: 研究提出了生态产品生产能力评价理论框架, 并对河南省林地生态产能进行实证研究, 表明该框架具有一定的科学性和应用价值, 对区域自然资源资产管理与核算具有借鉴意义。

关键词: 林地; 生态产能; 指标体系; 空间自相关; 河南省

Evaluation of Ecological Capacity of Forest Land ——Taking Henan Province as an Example

LIU Bingrui¹, QIAN Jiacheng¹, FENG Zhe¹, WU Kening^{1,2*}, ZHAO Ran¹, Wu Lianbei³

(1. School of Land Science and Technology, China University of Geosciences (Beijing), Beijing 100083, China; 2. Key Laboratory of Land Consolidation and Rehabilitation, Ministry of Natural Resources, Beijing 100035, China; 3. School of Economics and Management, Beijing Forestry University, Beijing 100083, China)

Abstract: The purpose of this article is to scientifically evaluate the production capacity of natural resources and ecological products, on the basis of which natural resource inventories and territorial spatial planning will be carried out, contributing to the realization of the value of ecological products. The methods employed include spatial autocorrelation analysis and comprehensive weighted evaluation method. The results show that: (1) Based on the connotation of production capacity of ecological products, an evaluation framework of production capacity of ecological products was constructed based on "environmental background-vegetation condition-human pressure-human input"; (2) The average value of the production capacity of ecological products in Henan Province is 0.341, with higher production capacity in the mountainous areas of South Henan and West Henan, and lower production capacity in the forested areas of North Henan and the plains; (3) the spatial differentiation of the production capacity of ecological products in forested areas of Henan Province is strongly affected by spatial correlation, and the global Moran Index is 0.7. In conclusion, the study proposed a theoretical framework for evaluating the production capacity of ecological products and conducts empirical research on the ecological production capacity of forest land in Henan Province, which has certain scientific and application value.

Key Words: forest land; ecological capacity; indicator system; spatial autocorrelation; Henan Province