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城市生态资产评估方法与应用 ——以广州市增城区为例

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摘要: 生态资产评估有助于人们以货币度量的方式衡量生态资源的价值,同时也为绿色 GDP 核算以及生态补偿机制提供科学依据。基于生态资产内涵,构建了包含自然资源价值和生态服务价值在内的生态资产价值评估指标体系,通过获取生态参数,对各项生态资产指标进行全面核算和时空动态分析,最后针对区域经济社会发展和生态资产状况提出了相应的生态资产管理对策与建议。研究表明,2003、2008 和 2013 年增城区的生态资产价值分别为 286.4、287.9 和 330.6 亿元,其中,自然资源价值占总价值平均比例为 62%,生态服务价值占总价值平均比例为 38%。10 年间,增城区各类自然资源价值均增加,尤其是农用地和草地资源价值增加幅度最大;各项生态服务价值均减小,其中土壤保育价值减小最为明显。基于核算结果,为增城区提出了包含自然资源管理、生态服务监管、生态资产保育和实施生态补偿 4 个方面的具体生态资产管理对策。

关键词: 土地利用;生态资产价值;指标体系;管理

Assessment method and application of urban ecological assets: a case study in Zengcheng, Guangzhou City

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Abstract: Ecological asset values are useful in assessing ecological resources in monetary units, and can provide a scientific basis for green GDP accounting and ecological compensation applications. In this paper, we presented an indicator system for measuring ecological asset values, including natural resource values and ecological service values. Based on these measurement indicators, we comprehensively calculated the values of ecological asset indicators and analyzed their spatio-temporal dynamics by using the Zengcheng District of Guangzhou as a case study. Furthermore, we presented relevant countermeasures and suggestions for more sustainable ecological asset management through integrative analysis of social-economic development and ecological asset dynamics. The results showed that the total ecological asset values of Zengcheng in 2003, 2008, and 2013 were 28.64, 28.79, and 33.06 billion yuan, respectively. The natural resource value and ecosystem service value on average accounted for 62% and 38%, respectively, of the total ecological asset value. The values of all types of natural resources increased during the past 10-year period, and the values for agricultural land and grassland resources increased the most. However, the values for ecosystem services have been consistently decreasing, among which the soil conservation value decreased the most. According to these findings in Zengcheng, we presented relevant ecological asset management recommendations from the perspectives of natural resource management, ecological service supervision,

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