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## 牡丹江市退耕还林前后生态安全评价

### Eco-security evaluation before and after Grain for Green in project Mudangjiang city

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中文关键词: [模型](#), [生态](#), [环境保护](#), [物元模型](#), [退耕还林](#), [牡丹江市](#)

英文关键词: [models](#) [ecology](#) [environmental protection](#) [matter element model](#) [Grain for Green](#) [Mudanjiang city](#)

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中文摘要:

退耕还林工程是当前中国最为宏大的生态修复与重建工程,开展区域退耕还林前后生态安全评价,可综合检验退耕还林成效,并为进一步巩固退耕还林成果、制定区域环保规划及可持续发展战略规划等提供决策依据。该文在深入分析生态安全本质的基础上,结合压力-状态-响应模型,构建了退耕还林区域生态安全评价指标体系,并采用物元模型对牡丹江市退耕还林前后生态安全进行评价。结果表明:1)退耕后,市区及绥芬河市生态安全等级下降,分别由较安全和安全降至临界安全,其他地区生态安全等级没有变化;2)各地区生态安全隶属度变化显著,表现为宁安地区生态安全隶属度值下降,而东宁、林口、海林、穆稜等地区生态安全隶属度值增加,其生态环境质量得到改善。概言之,物元模型能够揭示单个评价指标的分异信息,研究结果符合研究区实际情况。

英文摘要:

The Grain for Green is the most granted ecological restoration and reconstruction project in China. It has an important significance for eco-security assessment before and after the Grain for Green project to consolidate eco-environment achievement and to provide a basis for making regional environmental planning and sustainable development strategy. An eco-security evaluation index system about Grain for Green area was constructed using the press-station-response model, and the eco-security level before and after the Grain for Green project in Mudanjiang city was contrasted by the matter-element model. The results showed that: 1) The eco-security level in the urban and Suifenhe city declined, changed respectively from general security and security both to critical security. Well, the eco-security level in other counties had no change. 2) The correlation value varied obviously. The correlation value in Ning'an county dropt down, on the contrary, the correlation value in Dongning, Linkou, Hailin and Muling showed increasing trends and the eco-environment was improved significantly. In a word, the differentiation between indexes could be well revealed by the matter-element model. The results fit well to the real situation of the study area.

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