

林学—应用研究

基于DEA方法的中国林业生产效率分析及优化路径

李春华<sup>1</sup>, 李宁<sup>2</sup>, 骆华莹<sup>3</sup>, 王斌年<sup>3</sup>

- 1. 中南林业科技大学
- 2. 北京师范大学地表过程与资源生态国家重点实验室, 民政部/教育部减灾与应急管理研究院, 环境演变与自然灾害教育部重点实验室
- 3. 中南林业科技大学理学院

摘要:

提高生产效率是实现林业可持续经营的基本要求,也是发展现代林业的关键性工作之一。笔者首先运用DEA分析方法,对中国31个省份的林业投入产出的综合效率值、纯技术效率值、规模效率值和规模效益类型分别进行比较分析,进而对中国各省林业投入产出的投影值进行测算,以此为依据提出提高林业投入产出效率的改进措施。结果显示,天津、山西、广东和贵州4个省份林业投入产出效率达到最优,其余27个省份均存在不同程度的效率损失。这表明中国2006年林业整体效率较低,进一步的分析发现,27个省份的林业投入普遍存在不足,林业总产出有待进一步提高,投入不足制约了这些省份的林业投入产出效率的提高,只有适当改变各省的林业产业结构,提高林业资金的利用水平,才能达到林业的有效投入产出效率。

关键词: 投影分析

The Efficiency Analysis and Path Optimization of Forestry Input-Output in China Based on Data Envelopment Analysis

2, 2, 2

Abstract:

To improve the efficiency of forestry production is the basic requirement of sustainable forestry as well as one of the key tasks of constructing modern forestry. The authors used DEA to evaluate the comprehensive efficiency of input-output value of forestry, pure technical efficiency, scale efficiency and categories of scale values of forestry in 31 provinces (autonomous regions and municipalities). The results showed that Tianjin, Shanxi, Guangdong and Guizhou were relatively efficient in 31 provinces (autonomous regions and municipalities) of China as for the input-output aspect, which meant China's forestry management was in low level on the whole, meanwhile the projection analysis was employed to analyze the input or output low efficiency reasons, the analysis found that the forestry inputs were deficient across the provinces (autonomous regions and municipalities) and forestry added values were great lower than the optimal targets, which hindered the forestry efficiency enhance. By virtue of the conclusion, some optimal measurements of forestry efficient improvement were put forward. i.e. only appropriate to change the provincial forestry industry structure, improve the utilization of forestry resources, it was possible to achieve the effective input-output efficiency of forestry.

Keywords: projection analysis

收稿日期 2011-01-27 修回日期 2011-02-21 网络版发布日期 2011-08-01

DOI:

基金项目:

通讯作者: 李春华

作者简介:

作者Email: lichunhuahubu@126.com

参考文献:

本刊中的类似文章

扩展功能

本文信息

- Supporting info
- PDF(645KB)
- [HTML全文]
- 参考文献[PDF]
- 参考文献

服务与反馈

- 把本文推荐给朋友
- 加入我的书架
- 加入引用管理器
- 引用本文
- Email Alert
- 文章反馈
- 浏览反馈信息

本文关键词相关文章

- 投影分析

本文作者相关文章

- 李春华
- 李宁
- 骆华莹
- 王斌年

PubMed

- Article by Li,C.H
- Article by Li,n
- Article by Luo,H.Y
- Article by Yu,B.N

