

**Find out how to access preview-only content**Look Inside Get Access
Journal of Forestry Research

September 2008, Volume 19, Issue 3, pp 181-186

Forestland prediction of China based on forest ecosystem services for the first half of 21st century

Abstract

A new model was developed to predict forestland demand of China during the years of 2010–2050 in terms of the concept of forest ecosystem services. On the basis of the relationship between forest ecosystem services and classified forest management, we hypothesized that the ecological-forest provides ecological services, whereas commercial-forest supplies wood and timber production, and the influences of the growth of population, social-economic development target, forest management methods and the technology changes on forest resources were also taken into account. The prediction reveals that the demand of total forestland of China will be 244.8, 261.2 and 362.2 million ha by the year 2010, 2020 and 2050, respectively. The results demonstrated that China will be confronted with a shortage of forest resources, especially with lack of ecological-oriented forests, in the future. It is suggested that sustainable management of forest resources must be reinforced and more attention should be drawn to enhancing the service function of forest ecosystem.

Foundation project: This study was supported by the National Key Technologies R & D Program of China (2006BAD03A09) and the National Science Fund of China (40841001).



Related Content



References (31)

About this Article

Title

Forestland prediction of China based on forest ecosystem services for the first half of 21st century

Journal

Journal of Forestry Research
Volume 19, Issue 3 , pp 181-186

Cover Date

2008-09-01

DOI

10.1007/s11676-008-0031-6

Print ISSN

1007-662X

Online ISSN

1993-0607

Publisher

Northeast Forestry University

Additional Links

- [Register for Journal Updates](#)
- [Editorial Board](#)
- [About This Journal](#)
- [Manuscript Submission](#)

Topics

- [Forestry](#)

Keywords

- forest resources
- forest ecosystem services
- forestland prediction
- commercial forest
- ecological forest
- timber demand
- ecological demand

Authors

- [Ren-cai Dong](#) ⁽¹⁾
- [Chun-di Chen](#) ⁽¹⁾
- [Hong-bing Deng](#) ⁽¹⁾
- [Jing-zhu Zhao](#) ⁽¹⁾ ⁽²⁾

Author Affiliations

1. State Key Laboratory of Urban and Regional Ecology, Research Center for Eco-Environmental Sciences, CAS, Beijing, 100085, P.R. China
2. Institute of Urban Environment, Chinese Academy of Sciences, Xiamen, 361003, P.R. China

Continue reading...

To view the rest of this content please follow the download PDF link above.

7,495,303 scientific documents at your fingertips
© Springer, Part of Springer Science+Business Media

You have been redirected to our new and improved site.

More info [I'm good, don't tell me again](#)
.springer.com