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# The Spatial Analysis of Land Use Ecological Services Value in Loess Plateau in Northern Shaanxi Pronvice

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Objective This study looked at sustainable development and applied science methods. Method According to its actual ecological problems, through field surveys and measurements, using RS, GIS and statistical approaches, the paper researched regional land-use coverage change, and the spatial-temporal changes of ecological service values Result The ecological services value in the Loess Plateau in northern Shaanxi province was 46.723 billion yuan in 1978, the ecological services value in 1990 was 57.703 billion yuan, and the ecological services value in 2000 was 56.099 billion yuan. From 1978 to 1990, the ecological services value rose by 19.03%, and from 1990 to 2000 dropped by 2.86%. In the entire 22 year ecological value in northern Shaanxi province, the value b increased by 16.71%. Conclusion Ecosystem services in the Loess Plateau in northern Shaanxi province changed in spatial distribution. From 1978 to 2000, the ecosystem services value in northern Shaanxi province slowly increased, and it increased mainly in the south. But it is noteworthy that although the general trend is slowly increasing, the reduction of the ecosystem services value in local area was very keen. From 1990 to 2000 ecosystem services value in northern Shaanxi province declined delin. There was regional disparity in the improvement of the ecological environment. The northern region improved more expansively, and the southern region improved slowly.

【Key Words】 : Loess plateau Ecological services value Land use Spatial analysis

【Fund】 : 国家自然科学基金项目(40371003);; 教育部重点项目(01158)

【CateGory Index】 : S154.1



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## 【References】

Chinese Journal Full-text Database

9 Hits

- 1 HAO Hui-mei, REN Zhi-yuan, XUE Liang (College of Tourism and Environmental Science, Shaanxi Normal University, Xi'an 710062, China); Evaluation and Analysis on the Value of Vegetation NPP and Its Temporal and Spatial Distribution in Yulin Prefecture Based on 3S[J]; Geography and Geo-Information Science; 2008-05
- 2 JIN Yan1, HUANG Jingfeng1, GUAN Quanshui2, SUN Huasheng1, WANG Qiong2 (1. Institute of Agricultural Remote Sensing & Information Application, Zhejiang University, Hangzhou 310029, China; 2. Land resources bureau of Xianju County, Xianju, Zhejiang 317300, China); Ecological Capital Evaluation and Its Relation to Economy based on GIS in Xianju County[J]; Bulletin of Science and Technology; 2009-01
- 3 Meng Qingxiang1, 2, Liu Guobin2, Yang Qinke2 (1. College of Resources and Environment, Henan Agriculture University, 450002, Zhengzhou; 2. Institute of Soil and Water Conservation, CAS & MWR, 712100, Yangling, Shaanxi: China); Dynamic change of land use and its ecological effects on the Loess Plateau[J]; Science of Soil and Water Conservation; 2009-02
- 4 ZHANG Zhi-Guo1, 2, 3, WEI Jian-Jun4 (1. Institute of Soil and Water Conservation, Chinese Academy of Sciences & Ministry of Water Resources, Yangling 712100, China; 2. Graduate University of Chinese Academy of Sciences, Beijing 100049, China; 3. Shangqiu Normal College, Shangqiu 476000, China; 4. Northwest Electric Power Design Institute, Xi'an 710075, China); Influence of returning cropland to forest and grassland on ecosystem service value of downstream Yanhe River[J]; Chinese Journal of Eco-Agriculture; 2008-03
- 5 Han Yong1, Duan Junhao1, Zhang Baojun2, Chen Amin1 (1. Yangling (Zhouzhi) Introduction and Breeding of Modern Plant Demonstration Garden, Zhouzhi 710400; 2. Northwest A&F University, Shaanxi Yangling 712100); Demonstration on Ecological Forestry Management of Tailings[J]; Chinese Agricultural Science Bulletin; 2008-01

- 6 LI Jing,REN Zhi-yuan(College of Tourism and Environment,Shaanxi Normal University,Xi'an 710062);[Research on the Value of Soil and Water Conservation in Loess Plateau in Northern Shaanxi Province](#)[J];Scientia Agricultura Sinica;2007-12
- 7 LI Jing,REN Zhi-yuan(College of Tourism and Environmental Sciences,Shaanxi Normal University,Xi'an 710062,China);[GIS-Based Evaluation of Ecological Security of the Loess Plateau in Northern Shaanxi Province](#)[J];Resources Science;2008-05
- 8 MA Guo-jun,LIN Dong(Gansu Agricultural University,Lanzhou 730070,China);[Evaluation on Economic Value of Ecosystem Services in Shiyang River Basin](#)[J];Journal of Desert Research;2009-06
- 9 ZHANG Zhen1, GAO Jin-quan2, WEI Chao-fu3 (1Department of Management Engineering, Tianjin Institute of Urban Construction, Tianjin 300384, China; 2Tianjin Center for Popularization of Agricultural Technique, Tianjin 300061, China; 3Siping Popularization of Agricultural Technique Station, Siping 136000, Jilin, China; 4College of Resources and Environment, Southwest University, Chongqing 400716, China).;[Changes of agroecosystem services value under effects of land consolidation](#)[J];Chinese Journal of Applied Ecology;2010-03

## 【Citations】

Chinese Journal Full-text Database

7 Hits

- 1 SUN Rui, Zhu Qi jiang (Department of Resource and Environment Sciences, Beijing Normal University, Beijing\ 100875);[Distribution and Seasonal Change of Net Primary Productivity in China from April, 1992 to March, 1993](#)[J];ACTA GEOGRAPHICA SINICA;2000-01
- 2 LIU Yan sui (Institute of Geographic Sciences and Natural Resources Research, CAS, Beijing 100101, China);[Structural Analysis and Optimal Use of Land Types in Mountainous Regions — Taking Qinling Mountains of Shaanxi Province as an Example](#)[J];Acta Geographica Sinica;2001-04
- 3 Ouyang Zhiyun, Wang Rusong and Zhao Jingzhu ( Research Center for Eco Environmental Sciences,Academia Sinica,Beijing 100080). Chin.J.Appl.Ecol.,1999,10(5):635~640.;[Ecosystem services and their economic valuation.](#)[J];CHINESE JOURNAL OF APPLIED ECOLOGY;1999-05
- 4 ZHAO Jingzhu, XIAO Han and WU Gang ( Research Center for Eco Environmental Sciences, Chinese Academy of Sciences, Beijing 100085);[Comparison analysis on physical and value assessment methods for ecosystems services](#)[J];CHINESE JOURNAL OF APPLIED ECOLOGY;2000-02
- 5 XIAO Han,OUYANG Zhiyun,ZHAO Jingzhu,WANG Xiaoke (Research Center for Eco Environmental Sciences, Chinese Academy of Sciences, Beijing 100080).;[Forest ecosystem services and their ecological valuationA case study of tropical forest in Jianfengling of Hainan island.](#)[J];CHINESE JOURNAL OF APPLIED ECOLOGY;2000-04
- 6 HU Ke-lin1,YU Yan1,ZHANG Feng-rong1,WANG Ru2(1 College of Resource and Environmental Sciences,China Agricultural University,Beijing 100094;2Beijing House and Land Management Bureau,Beijing 100013);[The Spatial-Temporal Variability of Soil Organic Matter and Its Influencing Factors in Suburban Area of Beijing](#)[J];Scientia Agricultura Sinica;2006-04
- 7 Zhou Guang-sheng;Zhang Xin-shi(Institute of Botany, Chinese Academy of Sciences,Beijing 100044);[STUDY ON NPP OF NATURAL VEGETATION IN CHINA UNDER GLOBAL CLIMATE CHANGE](#)[J];ACTA PHYTOECOLOGICA SINICA;1996-01

## 【Co-references】

Chinese Journal Full-text Database

10 Hits

- 1 YU Guang-ming,WEI Ya-li,LU Di,TAO Wen-xing,ZHANG Min,WANG Li-guo(School of Urban and Environmental Sciences,Central China Normal University,Wuhan 430079,China);[Impact of regional land consolidation on the ecosystem and its compensation](#)[J];Journal of Safety and Environment;2006-04
- 2 CHEN Dong\jing,\ XU Zhong\min (State Key Laboratory of Frozen Soil Engineering, CAREERI, CAS, Lanzhou Gansu 730000, China);[Emergy Amalysis of Agricultural Eco-Economic System in Arid Region of Northwest China— A Case Study of Zhangye Prefecture in Heihe River](#)[J];Journal of Glaciology and Geocryology;2002-04
- 3 PENG Jian~1),2) WANG Yanglin~1),2) CHEN Yanfei~1),2) LI Weifeng~1),2) JIANG Yiyi~1),2)(~1)College of Environmental Sciences, Peking University, Beijing, 100871; ~2)Center for Digital City and Urban Landscape, Shenzhen Graduate School, Peking University, Shenzhen, 518057);[Economic Value of Urban Ecosystem Services:A Case Study in Shenzhen](#)[J];Acta Scientiarum Naturalum Universitatis Pekinesis;2005-04
- 4 MAO Xiaoling NI Jinren(Department of Environmental Engineering, Peking University; Key Lab of Water and Sediment Sciences, Ministry of Education, Beijing, 100871);[Recent Progress of Ecological Risk Assessment](#)[J];Acta Scientiarum Naturalum Universitatis Pekinesis;2005-04
- 5 Wu Dongliang; Liu Pengju; Tang Xiaoming; Zhu Qingke; Zhu Jinzhao.College of Resources and Environment, Beijing For.Univ.,100083,P.R.China.;[Simulating flow direction over raster-based hill-slopes and computing topographic parameters\(LS\) on GIS.](#)[J];Journal of Beijing Forestry University;2001-05
- 6 Cui Xianghui; Wang Bing; Kang Xingang; Feng Qiang. Research Institute of Forest Ecology and Environment, Chinese Academy of Forestry, Beijing, 100091, P.R.China.;[Research advances of laws of water and heat balance of desert ecosystem](#)[J];Journal of Beijing Forestry University;2003-02

- 7 Sun Jihua; Lang Kuijian. School of Management, Harbin Institute of Technology, Harbin, 150001, P. R. China.;[Design of apparently not related models with forest ecological benefits in broad sense](#)[J];Journal of Beijing Forestry University;2004-03
- 8 YU Jian(School of Economics and Management,Civil Aviation University of China,Tianjin 300300);[An Analysis of Total Factor Productivity of China Airlines Based on Malmquist Index](#)[J];Journal of Beijing Institute of Technology(Social Sciences Edition);2007-06
- 9 Zhang Wenbo Fu Suhua Liu Baoyuan (Department of Geography, Beijing Normal University, 100875, Beijing, China);[ERROR ASSESSMENT OF VISUAL ESTIMATION PLANT COVERAGE](#)[J];Journal of Beijing Normal University(Natural Science);2001-03
- 10 Xu Qiao He Mengchang Yang Zhifeng Yu Jingshan Mao Xianqiang (Institute of Environmental Sciences, State Key Laboratory of Environment Simulation and Pollution Controls, Beijing Normal University, Beijing 100875);[ASSESSMENT ON URBAN ECOSYSTEM SERVICES OF GUANGZHOU CITY](#)[J];Journal of Beijing Normal University(Natural Science);2003-02

## 【Secondary References】

Chinese Journal Full-text Database

4 Hits

- 1 WU Nan1,2,3,HE Fang4,GAO Ji-xi1,5,LI Ling4,LUO Zun-lan3(1.Chengdu Institute of Mountain Hazards and Environment,CAS,Chengdu 610041; 2.Graduate University of the Chinese Academy of Sciences,Beijing 100049;3.Institute of Ecology,Chinese Research Academy of Environmental Sciences,Beijing 100012;4.Department of Resource and Environment,Anhui Agricultural University,Hefei 230036;5.Department of Science,Technology and Standards,Ministry of Environmental Protection of PRC,Beijing 100035);[Dynamic change of soil retention function and evaluation on its economic value in mountainous area of Upper Huaihe River Basin](#)[J];Journal of Anhui Agricultural University;2010-01
- 2 Ma Junfei 1, 2, Lu Changhe 1, Yu Bohua 1 1. Institute of Geographic Sciences and Natural Resources Research, Chinese Academy of Sciences, Beijing 100101, P. R. China 2. Graduate University, Chinese Academy of Sciences, Beijing 100049, P. R. China;[Impacts of Sloping Land Conversion Program on the vegetation in loess hilly and gully area of northern Shaanxi](#)[J];生态经济(英文版);2009-02
- 3 BIAN Liang1,2,HU Zhi-bin1,SONG Wei-dong2 (1Institute of Applied Ecology,Chinese Academy of Sciences,Shenyang 110016,China;2School of Geomatics,Liaoning Technical University,Fuxin 123000,Liaoning,China).;[Eco-environmental effects of land use change in Changwu County of Shannxi Province](#)[J];Chinese Journal of Ecology;2009-09
- 4 TIAN Yao-wu1,2,HUANG Zhi-lin2,XIAO Wen-fa2,ZHAO Lian-jiang3,ZHAO Fu-jun3,AI Xiao-ying3(1.Forestry College,He'nan University of Science and Technology,Luoyang,He'nan 471003,China; 2.Key Laboratory of Forest Ecology and Environment,State Forestry Administration China,Research Institute of Forest Ecology,Environment and Protection,Academy of Forestry,Beijing 100091,China; 3.Yuzhou Water Resources Bureau,He'nan Province,Xuchang,He'nan 461000,China);[Effects of Conversion Cropland to Forest on Values of Ecosystem Services Based on RS and GIS in Heigou Watershed of Three Gorges Reservoir Area](#)[J];Research of Soil and Water Conservation;2010-03

## 【Secondary Citations】

Chinese Journal Full-text Database

10 Hits

- 1 LIU Yan sui (Institute of Geography, Chinese Academy of Sciences, Beijing 100101);[Structural Pattern of Mountain Land Types and Optimal Allocation of Land Use](#)[J];SCIENTIA GEOGRAPHICA SINICA;1999-06
- 2 GUO Xu dong, FU Bo jie, CHEN Li ding, MA Ke ming, LI Jun ran (Research Center for Eco Environmental Sciences, Chinese Academy of Sciences, Beijing 100085, China);[The Spatio-temporal Variability of Soil Nutrients in Zunhua Plain of Hebei Province: Semivariogram and Kriging Analysis](#)[J];ACTA GEOGRAPHICA SINICA;2000-05
- 3 Zheng Du\\ Shen Yuancun (Institute of Geography, Chinese Academy of Sciences, Beijing 100101);[STUDIES ON PROCESS, RESTORATION AND MANAGEMENT OF THE DEGRADING SLOPELANDS — — A CASE STUDY OF PURPLE SOIL SLOPELANDS IN THE THREE GORGES AREAS](#)[J];ACTA GEOGRAPHICA SINICA;1998-02
- 4 Liu Shirong. Associate Professor, Xu Deying, Wang Biug (The Research Institute of Forestry, CAF Beijing 100091).;[Impacts of Climate Change on Productivity of Forests in China I. Geographic Distribution of Actual Productivity of Forests in China](#)[J];Forest Research;1993-06
- 5 HU Ke lin LI Bao guo LIN Qi mei LI Gui tong (China Agricultural University, Beijing 100094) CHEN De li (Melburne University,Parkville Victoria 3052 Australia);[Spatial Variability of Soil Nutrient in Wheat Field](#)[J];TRANSACTIONS OF THE CHINESE SOCIETY OF AGRICULTURAL ENGINEERING;1999-03
- 6 Liu Yinhan;Yang Donglang;Liu Yansui;Yue Dspeng (Department of Geography,Shaanxi Narmal University Xian 710062);[LAND SUCCESSION ON THE VERTICAL NATURAL ZONES OF QINLING-BASHAN MOUNTATINOUS AREA IN SHAANXI PROVINCE](#)[J];MOUNTAIN RESEARCH;1996-01
- 7 LIU Yansui (Institute of Geography,Chinese Academy of Sciences,Beijing 100101);[STRUCTURAL PATTERN OF LAND TYPE AND ECOLOGICAL DESIGN IN MOUNTAINOUS REGION](#)[J];JOURNAL OF

MOUNTAIN RESEARCH;1999-02

- 8 ZHANG ShiRong, HUANG YuanFang, LI Bao Guo, GAO Jun (Department of Soil and Water Sciences, China Agricultural University, Beijing 100094, China);**The Temporal and Spatial Variability of Soil Organic Matter Contents in the Alluvial Region of Huang-Huai-Hai Plain,China**[J];Acta Ecologica Sinica;2002-12
- 9 HUANG Yuan-Fang~1, ZHOU Zhi-Yu~2, YUAN Xiao-Yong~1, ZHANG Hong-Yan~1 (1. China Agricultural University, Beijing 100094, China; 2: Lanzhou University, Gansu 730020, China);**Spatial variability of soil organic matter content in an arid desert area**[J];Acta Ecologica Sinica;2004-12
- 10 Lu Lixin (Department of Geography);**AN INTEGRATE EVALUATION OF ECOLOGICAL LAND TYPES IN THE EAST SECTION OF SHAANXI QINLING MOUNTAINS**[J];Journal of Shaanxi Normal University(Natural Science Edition);1988-04

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