Ecosystem services and sustainable development

ZHANG Xue-ying1, LI Ying-zhi2 (1. Subdepartment of Guangdong Hydrology Bureau in Zhaoqing, 526060; 2. Environmental Science and Engineering College, Sun Yat-sen University, Guangzhou 510275, China)

This paper has described the ecosystem service functions, the ecosystem has not merely offered food, medicine and other to human being and produced life raw materials, the more important function is support the life system in which the mankind depends on for existence, and afford to maintain living beings of material, purify the environment, maintain the balance and stability of atmospheric chemistry. Then, the relations between ecosystem services and sustainable development are analyzed. Sustainable development should be based on ecological environment protection, in concert with bearing capacity of the resource and environment. However the destruction of human activity to forest, wetland and other ecosystems, having already endangered the service functions of the ecosystem seriously, it is urgent to protect the ecosystem service functions; the countermeasure of protecting the ecological service functions is suggested.

Key Words: Ecosystem services, Sustainable development, Environment

Category Index: X171

References

1. GU Xiang1 ZHOU Sheng-lu1 ZHANG Hong-fu1 LI Su-ju2 GENG Zhao2 (1. School of Geographic and Oceanographic Sciences, Nanjing University, Nanjing 210093, China; 2. Tongshan Bureau of Land and Resources, Tongshan 221116, Jiangsu, China) Temporal variation and regional differences of ecosystem service value of Nanjing City[J]. Chinese Journal of Ecology 2009-03
2. WANG Yong, LUO Shi-Ming (Institute of Tropical and Subtropical Ecology, South China Agricultural University, Guangzhou 510642, China) Principles and advances in agro-ecological service assessment[J]. Chinese Journal of Eco-Agriculture 2008-01

Citations

1. OUYANG Zhi Yun WANG Xiao Ke MIAO Hong (Research Center for Eco Environmental Sciences, Chinese Academy of Sciences, Beijing 100080, China) A primary study on Chinese terrestrial ecosystem services and their ecological-economic values[J]. ACTA ECOLOGICA SINICA 1999-05

Co-citations

1. WEI Mei-yu ZHAO Hong (Depa. of Life Science, Qiannan Normal College for Nationalities, Duyun 558000, China) Structural Analysis on Duyun City Street Trees Disposition[J]. Journal of Qiannan Normal College of Nationalities, 2004-06
2. Guo Jianping1 Li Fengxia1 2 (1. Chinese Academy of Meteorological Sciences, Beijing 100081; 2. Qinghai Forest Investigation Design Institute, Xining 810000, China) Forest investigation and design[J]. Forest Investigation Design 2004-06

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Ecosystem services and sustainable development—《Ecologic Science》2004年03期

1. Propeck of conference Full-text Database


3. GAO Chang hai 1, LIU Xin ping 1, XIE Guang hui 2 (1. Changsha Institute of Agricultural Modernization, Chinese Academy of Science, Changsha 410125, China; 2. Land and Resources College, Hunan Normal University, Changsha 410081, China):A STUDY ON THE AGRICULTURE POSITIONING AND ITS DEVELOPMENT STRATEGY OF THE YANGTZE BASIN AFTER CHINA BEING A WTO MEMBER[J];TROPICAL GEOGRAPHY;2000-03

4. LIU You hua 1, CHEN Xiao hong 2, CHEN Yong qin 3, ZENG Cai hua 2 (1.Shenzhen Institute of Environmental Sciences, Shenzhen 518008,China; 2. Center for Water Resources & Environment, Zhongshan University, Guangzhou510275,China; 3. Department of Geography, The Chinese University of Hong Kong, Hong Kong, China):CORRELATION ANALYSIS ON ABNORMAL CHANGE OF FLOOD LEVEL IN THE CENTRAL AREA OF THE PEARL RIVER DELTA[J];Tropical Geography;2003-03


6. CAO Jianhua1) JIANG Jusheng2) JIANG Yusi1) LIN Weifu1) WU Zhixiang1) (1 Rubber Research Institute, CATAS, Danzhou, Hainan 571732 Innovation Centre of Sci & Tec in State Farms, Haikou, Hainan 570206):Intercropping of Mulberry Indigenous to Hainan Under Rubber Plantation and Its Ecological Service Function Assessment[J];Chinese Journal of Tropical Agriculture;2008-03

7. KONG Qiong-ju1,2 FANG Guo-hua1 MA Xiu-feng2,1.Environmental Science and Engineering College of Hohai University,Nanjing 210098,China;2.Dam safety and Management Technology Research Institute Jiangxi Water Conservancy Science Academy,Nanchang 330029,China):Evaluation on ecological service function and value of Zhelin reservoir[J];Yangtze River;2008-06

8. ZHOU Guo-yi,ZHANG De-qiang,WEN Da-zhi,DING Ming-mao, LIU Ju-xiu (South China Institute of Botany, the Chinese Academy of Sciences, Guangzhou 510650, China):INFLUENCES OF HARVESTING TIMES IN BIOMASS ACCUMULATION IN FOUR FORAGE GRASSES[J];Journal of Tropical and Subtropical Botany;2000-S1

9. SONG Xu-zhong–1 WANG Cheng–1 PENG Zhen–1–1 YANG Hua–2–1 (1.Forestry Research Institute,Chinese Academy of Forestry,Beijing,China 100091;2.Research Institute of Tropical Forest,Beijing Forestry Research Institute,Chinese Academy of Forestry,Guangzhou510520):DIVERSE ECOSYSTEM SERVICES AND COMPLEX AGRICULTURAL ECOSYSTEM[J];Journal of Shandong Agricultural University(Natural Science Edition);2007-01


China Proceedings of conference Full-text Database


2. Su Chao-yang Miao Chang-hong (Research Center of Yellow River Civilization and Sustainable Development and College of Environment and Planning,Henan University,Kaifeng 475004,China):Based on the Value of Ecosystem Services of Land Use Planning assessment in Kaifeng [A];[C];2008

3. TANG Ya1,2.XIE Jia- su1,CHEN Ke- ming1,HE Yong- hua1,SUN Hui1 (1.Chengdu Institute of Botany,Chinese Academy of Sciences,Chengdu6 1 0 0 4 1 ,PRC; 2.International Centre for Integrated Mountain Development,G.P.O.Box32 2 6 ,K athmandu,N epal):Contour Hedgerow Intercropping Technology and Its Application in the Sustainable Managementof Sloping Agricultural Lands in the Mountains[A];[C];2000

4. Qin Wei, Zhu Qingke (College of Soil and Water Conservation, Beijing Forestry University; Key Laboratory of Soil and Water Conservation and Combating Desertification, Ministry of Education, 100083, Beijing, China):Review of soil conservation value by forest in green gross domestic products accounting[A];[C];2006


6. Lai Guangping,Yang Hong College of Marine,Shanghai Ocean University,Shanghai 200090,China:Evaluation of Estuary Ecosystem Services:A case study in Shanghai Yangtze Estuary[A];[C];2008

7. Bai Bo (Institute of Development Studies, Yunnan University, Kunming, Yunnan, 650091):Research Progress on Ecological Assets Valuation[A];[C];2003

8. ZENGZhaohai HU Yao 2 ZHENG Yong LIU Yingjun (PERC, College of Agronomy and Biotechnology, China Agricultural University, Beijing 100094; Hunlunbeier Animal Husbandry Bureau of Inner Mongolia, China):The Primary Estimation of the Ecosystem Services Valuation in Hunlunbeier[A];[C];2004


10. Su Chao-yang Miao Chang-hong (Research Center of Yellow River Civilization and Sustainable Development and College of Environment and Planning,Henan University,Kaifeng 475004,China):Based on the Value of Ecosystem Services of Land Use Planning assessment in Kaifeng [A];[C];2008

11. TANG Ya1,2.XIE Jia- su1,CHEN Ke- ming1,HE Yong- hua1,SUN Hui1 (1.Chengdu Institute of Botany,Chinese Academy of Sciences,Chengdu6 1 0 0 4 1 ,PRC; 2.International Centre for Integrated Mountain Development,G.P.O.Box32 2 6 ,K athmandu,N epal):Contour Hedgerow Intercropping Technology and Its Application in the Sustainable Managementof Sloping Agricultural Lands in the Mountains[A];[C];2000

12. Qin Wei, Zhu Qingke (College of Soil and Water Conservation, Beijing Forestry University; Key Laboratory of Soil and Water Conservation and Combating Desertification, Ministry of Education, 100083, Beijing, China):Review of soil conservation value by forest in green gross domestic products accounting[A];[C];2006


14. Lai Guangping,Yang Hong College of Marine,Shanghai Ocean University,Shanghai 200090,China:Evaluation of Estuary Ecosystem Services:A case study in Shanghai Yangtze Estuary[A];[C];2008

15. Bai Bo (Institute of Development Studies, Yunnan University, Kunming, Yunnan, 650091):Research Progress on Ecological Assets Valuation[A];[C];2003

16. ZENGZhaohai HU Yao 2 ZHENG Yong LIU Yingjun (PERC, College of Agronomy and Biotechnology, China Agricultural University, Beijing 100094; Hunlunbeier Animal Husbandry Bureau of Inner Mongolia, China):The Primary Estimation of the Ecosystem Services Valuation in Hunlunbeier[A];[C];2004

17. CHENG Song Institute of Mountain Hazards and Environment.the Chinese Academy of Sciences,No.9.Block 4,South Retain Road,Chengdu.Sichuan 610041.P.R.China:Ecological Engineering for South to North Water Transfer Project in China;A Review of Conservation Buffer System Approach[A];[C];2007

18. Su Chao-yang Miao Chang-hong (Research Center of Yellow River Civilization and Sustainable Development and College of Environment and Planning,Henan University,Kaifeng 475004,China):Based on the Value of Ecosystem Services of Land Use Planning assessment in Kaifeng [A];[C];2008

19. TANG Ya1,2.XIE Jia- su1,CHEN Ke- ming1,HE Yong- hua1,SUN Hui1 (1.Chengdu Institute of Botany,Chinese Academy of Sciences,Chengdu6 1 0 0 4 1 ,PRC; 2.International Centre for Integrated Mountain Development,G.P.O.Box32 2 6 ,K athmandu,N epal):Contour Hedgerow Intercropping Technology and Its Application in the Sustainable Managementof Sloping Agricultural Lands in the Mountains[A];[C];2000

20. Qin Wei, Zhu Qingke (College of Soil and Water Conservation, Beijing Forestry University; Key Laboratory of Soil and Water Conservation and Combating Desertification, Ministry of Education, 100083, Beijing, China):Review of soil conservation value by forest in green gross domestic products accounting[A];[C];2006

China
Ecosystem services and sustainable development—《Ecologic Science》2004年03期

**Co-references**

Chinese Journal Full-text Database

4. Han Yi, Sun Hui, Tang Ya (Department of Environmental Science & Engineering, School of Architecture & Environment, Sichuan University, Chengdu 610065, China), Value of Ecosystem Services and Its Assessment Methodology [J]. Sichuan Environment: 2005-01
5. Cheng Wu (Rear-service Department, Sichuan Agricultural University, Yaan 625014, Sichuan, China), Analysis of Land Use and Landscape Pattern in Yucheng District of Yaan [J]. Journal of Sichuan Agricultural University: 2005-03
9. Shi Pei-li, Li Lin, Wen-hua 1, He Wei-ming 2 and Xie Gao-di 1 (1. Institute of Geography and Resources, Chinese Academy of Sciences, Beijing 100101, China; 2. Key Laboratory of Environmental Change and Natural Disaster, the Ministry of Education of China), Economic Estimation of Ecosystem Services of Natural Forests in Western Sichuan, China [J]. Journal of Mountain Research: 2002-01

**Secondary References**

Chinese Journal Full-text Database

1. Shi Na-nai, Zhong Jin-yian, Wu Feng, Lin Ying-zhi (1. State Key Laboratory of Water Environment Simulation, School of Environment, Beijing Normal University, Beijing 100875, China; 2. Institute of Geographic Sciences and Natural Resources Research, Chinese Academy of Sciences, Beijing 100101, China), System for identifying and zoning ecosystem services and its application in Poyang Lake area [J]. Chinese Journal of Ecology: 2009-09
2. Chen Yuanquan, Gao Wangsheng (Agronomy and Bio-technology College, China Agriculture University, Beijing 100093), General Evaluation on the Value of Farmland Ecological Service in Major Grain Production Regions of China [J]. Chinese Journal of Agricultural Resources and Regional Planning: 2009-01
3. Xiao Hong-sheng 1, Wang Yong 2, Luo Shi-Ming 1 (1. Institute of Tropical and Subtropical Ecology, South China Agriculture University, Guangzhou 510642, China; 2. Agriculture Bureau of Foshan, Foshan 528000, China), Functions and assessment methods of protecting soil fertility of agro-forestry ecosystems [J]. Chinese Journal of Eco-Agriculture: 2008-05
4. Zhang Hong-feng 1, 2, Ouyang Zhi-yun 1, Zheng Hua 1, Xiao Yi 1 (1. State Key Laboratory of Urban and Regional Ecology, Research Center for Eco-environmental Sciences, Chinese Academy of Sciences, Beijing 100085, China; 2. Guangdong Academy of Environmental Sciences, Guangzhou 510045, China), Evaluation of agricultural ecosystem services value in Manas River Watershed of China [J]. Chinese Journal of Eco-Agriculture: 2009-06