

《中国农业发展战略研究》专题快报

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【动态资讯】

1. Study shows wetlands provide landscape-scale reduction in nitrogen pollution

【NATIONAL SCIENCE FOUNDATION】 In agricultural regions such as the U.S. Midwest, excess nitrate from crop fertilizer makes its way into rivers and streams through subsurface drainage channels and agricultural ditches. High nitrate concentrations in waterways can be harmful to ecosystems and human health, contaminating drinking water and eventually flowing downstream far enough to increase the size of the Gulf of Mexico's "dead zone." A study published today in the journal *Nature Geoscience* by National Science Foundation (NSF)-funded researchers offers new insights into this problem: Multiple wetlands, or "wetland complexes" in a watershed, are extremely effective at reducing nitrate levels in rivers and streams. Wetland complexes can be five times better at reducing nitrate than the best land-based nitrogen mitigation strategies, the scientists say. "Agricultural productivity benefits the economy, but is often accompanied by environmental costs," says Tom Torgersen, director of NSF's Water, Sustainability and Climate program, which funded the research. "This study demonstrates that retaining or restoring wetlands in intensively managed agricultural watersheds would reduce nitrate in rivers and improve local water quality, while also reducing nitrate exports to the Gulf of Mexico hypoxic [dead] zone." Using water samples collected over a four-year period from more than 200 waterways in the 17,000-square-mile Minnesota River Basin (MRB), along with geospatial information on land use in the MRB watershed, researchers isolated the effects of wetlands on stream and river nitrate concentrations.

链接:

https://www.nsf.gov/news/news_summ.jsp?org=NSF&cntn_id=244250

2. Worsening worldwide land degradation now 'critical', undermining well-being of 3.2 billion people

【EurekaAlert!】 Medellín, Colombia -- Worsening land degradation caused by human activities is undermining the well-being of two fifths of humanity, driving species extinctions and intensifying climate change. It is also a major contributor to mass human migration and increased conflict, according to the world's first comprehensive evidence-based assessment of land degradation and restoration. The dangers of land degradation, which cost the equivalent of about 10% of the world's annual gross product in 2010 through the loss of biodiversity and ecosystem services, are detailed for policymakers, together with a catalogue of corrective options, in the three-year assessment report by more than 100 leading experts from 45 countries, launched today. Produced by the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES), the report was approved at the 6th session of the IPBES Plenary in Medellín, Colombia. IPBES has 129 State Members. Providing the best-available evidence for policymakers to make better-informed decisions, the report draws on more than 3,000 scientific, Government, indigenous and local knowledge sources. Extensively peer-reviewed, it was improved by more than 7,300 comments, received from over 200 external reviewers.

链接:

https://www.eurekaalert.org/pub_releases/2018-03/tca-wwl032418.php

3. Alpine grassland productivity not sensitive to climate warming on third pole

【CHINESE ACADEMY OF SCIENCES】 The Tibetan Plateau has experienced more rapid climate warming than the global average, coupled with greater interannual variation in precipitation over the past 50 years. How will such dramatic climate change influence the structure and function of alpine grasslands? Interest in this topic is high because of its importance to the sustainable development of animal husbandry and the livelihood of Tibetan inhabitants. In 2011, HE Jinsheng's research team at the Northwest Institute of Plateau Biology, Chinese Academy of Sciences, collaborating with scientists from Peking University, established a warming-by-precipitation manipulative experiment at the Haibei National Field Research Station of Alpine Grassland Ecosystem. By combining the field manipulative experiment, 32 years of field monitoring and a meta-analysis from nine sites across the plateau, the impact of climate change on species composition and net primary productivity in Tibetan alpine grasslands was investigated. The results have been published

online in PNAS in a paper entitled "Shifting plant species composition in response to climate change stabilizes grassland primary production."The study showed that, although the Haibei station became warmer and drier, aboveground net primary productivity did not vary systematically over the past 32 years. Meanwhile, the relative contribution of plant functional groups to total productivity changed significantly; over time, the productivity of grasses increased, and that of sedges decreased. The shifted species composition enabled the aggregate community to access more water and thus buffered the community to a stabilization of productivity under warming-induced drier conditions.

链接:

http://english.cas.cn/newsroom/research_news/201804/t20180418_191758.shtml

4. New source of global nitrogen discovered

【EurekAlert!】 For centuries, the prevailing science has indicated that all of the nitrogen on Earth available to plants comes from the atmosphere. But a study from the University of California, Davis, indicates that more than a quarter comes from Earth's bedrock. The study, to be published April 6 in the journal *Science*, found that up to 26 percent of the nitrogen in natural ecosystems is sourced from rocks, with the remaining fraction from the atmosphere. Before this study, the input of this nitrogen to the global land system was unknown. The discovery could greatly improve climate change projections, which rely on understanding the carbon cycle. This newly identified source of nitrogen could also feed the carbon cycle on land, allowing ecosystems to pull more emissions out of the atmosphere, the authors said. "Our study shows that nitrogen weathering is a globally significant source of nutrition to soils and ecosystems worldwide," said co-lead author Ben Houlton, a professor in the UC Davis Department of Land, Air and Water Resources and director of the UC Davis Muir Institute. "This runs counter the centuries-long paradigm that has laid the foundation for the environmental sciences. We think that this nitrogen may allow forests and grasslands to sequester more fossil fuel CO₂ emissions than previously thought."

链接:

https://www.eurekalert.org/pub_releases/2018-04/uoc--nso032918.php

5. The 'bread basket' of the tropics? Study explores tropical grain production

【EurekAlert!】 URBANA, Ill. - It wasn't until the late-1990s that the tropics began to emerge as a possible region for growing grain crops, particularly soybean. But, today, farmers in

central Brazil are running productive farm businesses, largely due to a new tropical system of production known as safrinha, or succession farming, which results in two large crops--soybean and maize--per year. Agricultural economists at the University of Illinois wanted to learn more about the productivity of grain production in this tropical area. In a study published in the International Journal of Agricultural Management, they examine input and output factors for several large-scale farms located in the state of Mato Grosso, Brazil. "Mato Grosso, where this research is set, is by the far the largest geographical state producing soybean in the world," says Peter Goldsmith, a professor in the Department of Agricultural and Consumer Economics at U of I and lead author of the study. "They far surpass Illinois or Iowa as a state, and the yields are the same as in the U.S. But nobody 20 years ago thought you could produce soybean in the tropics."

链接:

https://www.eurekalert.org/pub_releases/2018-04/uoi-c-tb041718.php

6. 河南用好土地为乡村振兴提供更强支撑

【河南日报农村版】随着乡村振兴战略的全面实施，作为国民经济建设的基础性、先行性行业，河南省国土资源厅将积极作为，勇于探索，大胆实践，为乡村振兴提供强有力的基础支撑和动力，推动农业全面升级、农村全面进步、农民富裕幸福，谱写新时代乡村振兴新篇章。多年来，河南省坚守耕地数量和质量两条红线，强化土壤污染管控和修复，扩大轮作休耕制度试点规模，加强永久基本农田后期管护，坚持最严格的水资源管理制度，加强土地整理项目的实施，为农业发展和质量兴农、绿色兴农提供了基础支撑。乡村振兴，产业兴旺是重点。随着乡村振兴战略的全面实施，省国土资源厅将在土地整理中当好主力军，不断提高土地质量，建设高标准良田，大力推进土地利用综合改革，以农业供给侧结构性改革为主线，加快构建现代农业产业体系、生产体系、经营体系。今后，河南省将继续大力推行农业灌溉用水总量控制和定额管理，统筹推进工程节水、品种节水、农艺节水、管理节水、治污节水，遵循生态系统整体性、生物多样性规律，统筹山水林湖草系统治理，宜农则农、宜牧则牧，宜渔则渔，宜林则林，打造人与自然和谐共生发展新格局；围绕农业供给侧结构性改革发力，从源头上抓质量，着力调整优化农业结构，减少低端无效供给，增加销路好、品质高、市场缺的优质农产品生产，进一步提升农业创新力和竞争力，培育乡村发展新动能。

链接:

http://www.moa.gov.cn/xw/qg/201805/t20180515_6142106.htm

7. 新疆草原生态环境明显改善

【新疆经济报】 这些天，在呼图壁县雀尔沟镇独山子村，大型机械正忙着播种羊草。羊草是多年生禾本科优质牧草，可以实现荒漠化治理、盐碱地改良、涵养水源等生态效益。雀尔沟镇专门邀请中国科学院植物研究所专家进行现场指导，推广种植中科院培育的羊草品种，修复草场生态环境。“我们在甘肃省酒泉市做过测试，这种羊草播种第二年覆盖率就可以达到50%，第三年就能百分之百覆盖，它对防风固沙、水土保持有极强的作用。”中国科学院植物研究所博士刘辉说。2017年，呼图壁县已推广种植万亩羊草，2018年，预计种植面积将达到1.35万亩，此外还将新增215亩试验田。2019年，呼图壁县羊草种植面积力争达到5万亩，实现草原生态效益、经济效益双丰收。党的十九大报告提出，必须树立和践行绿水青山就是金山银山的理念，坚持节约资源和保护环境的基本国策，像对待生命一样对待生态环境，统筹山水林田湖草系统治理，实行最严格的生态环境保护制度。2011年，国家对新疆、内蒙古等主要草原畜牧区，全面建立草原生态保护补助奖励机制（简称草原补奖机制），推进草原禁牧和草畜平衡。据自治区畜牧厅草原处提供的数据显示，自草原补奖机制实施以来，新疆天然草原生态环境明显改善。特别是2016年新一轮草原生态保护补助奖励启动以来，新疆进一步加大草原保护力度，草原禁牧补助标准由原来每亩5元提高至6元，草畜平衡奖励标准由原来的每亩1.5元提高至2.5元，水源涵养区面积也由原来的150万亩增加至510万亩。全区实施禁牧草原面积1.501亿亩，草畜平衡管理面积5.409亿亩。2017年，全疆天然草原牧草长势总体平稳，综合植被盖度、综合植被高度分别为41.48%和27.9厘米，比近五年分别增加1.71个百分点和2.42厘米。其中，全区天然草原禁牧区鲜草产量比2010年提高32.66%，全区天然草原草畜平衡区鲜草产量比2010年提高了26.53%，全区天然草原超载率由2010年的33%降至目前的8.7%。和静县哈尔莫敦镇觉伦图尔根村牧民芒凯说：“实施草原补奖机制以来，我们这里的草越长越旺，有些地方的草都没过了膝盖，我们还把补助资金用来改良牲畜品种。”这几年，按照“统一设计、统一建造”原则，和静县通过建设集约化、规模化安居小区，转移安置从禁牧区退出的牧民、牲畜。现在，安居小区已经形成具有一定规模的养殖大户，畜牧业由“四季游牧、靠天养畜”的生产方式逐步向“暖季放牧、冷季舍饲”的方式转变。截至2017年，和静县退牧还草面积11万亩、禁牧休牧65万亩、草畜平衡2751万亩。牧民不仅享受到补助奖励资金，还人工种植饲草料，不仅让草原生态系统得以保护与修复，收入也有了提高。2018年，新疆计划利用24.77亿元的国家草原生态保护补助奖励资金，对6.9亿亩草原落实补助奖励政策。其中，禁牧草原1.5亿亩，实施草畜平衡管理草原5.4亿亩。

链接:

<http://www.cj.gov.cn/zgxx/gnyw/850240.htm>

8. 2018中国农业展望大会在京开幕

【农业农村部新闻办公室】本网讯 4月20日，2018中国农业展望大会在北京开幕。大会发布了《中国农业展望报告（2018-2027）》，对未来10年中国主要农产品市场供需形势进行了预测和展望。农业农村部副部长韩俊出席大会并讲话，中国农业科学院院长唐华俊院士致欢迎辞。韩俊指出，城镇化和收入水平提高，为农业供给体系升级提出了更高要求，也提供了巨大拉动力。要利用粮食供求关系相对宽松的时期，积极开展粮改饲、玉米大豆轮作。他强调，要加强农业生产和市场监测预警，通过信息引导，促进农产品产销对接，进一步完善农业全球战略布局，推动进口来源多元化，合理分散风险。唐华俊表示，中国农业科学院在农业监测预警理论与方法创新、标准和数据建设、系统研建等方面开展了卓有成效的工作，取得重要进展，为推动现代农业发展提供了强有力的技术支撑和信息保障。今后，将继续加强力量、持续创新，将农业展望大会打造成信息发布的权威品牌。会议发布了《中国农业展望报告（2018-2027）》，针对18个品种的未来10年走势进行了专题发布，并围绕乡村振兴、国际贸易、农业大数据与监测预警等主题开展了研讨，64位专家作报告。本次大会是我国召开的第5届农业展望大会，作为中国特色农业信息监测预警体系建设的重要成果，将对推进新形势下现代农业发展和乡村振兴战略实施发挥重要作用。中国农业科学院副院长吴孔明院士主持开幕式。

链接:

http://www.moa.gov.cn/xw/zwdt/201804/t20180420_6140714.htm

9. 畜牧业现代化暨畜禽粪污资源化利用论坛在长沙举办

【农业农村部新闻办公室】本网讯 4月17日，畜牧业现代化暨畜禽粪污资源化利用论坛在湖南省长沙市举办，农业农村部副部长于康震出席论坛时强调，粪污资源化利用是实施乡村振兴战略的重要举措，是一项重要政治任务，要以实施乡村振兴战略和建设美丽中国为契机，把绿色发展摆在更加突出的位置，举全行业之力破解粪污难题，实现粪污“变废为宝”，推进畜牧业转型升级。会议指出，自2016年12月习近平总书记就解决好畜禽养殖废弃物处理和资源化问题发表重要讲话以来，粪污资源化利用工作全面铺开，畜牧业绿色发展理念深入人心，粪污资源化利用制度基本确立，工作推进和责任落实机制初见成效，以畜牧大县为核心的政策扶持体系基本构建，农牧循环稳步推进，科技支撑能力不断增强，粪污资源化利用取得了阶段性成效，实现了开门红。会议强调，要深刻认识粪污资源化利用工作的重要性和紧迫性，把属地管理责任落实、落细，让良好生态成为乡村振兴支撑点；要落实好以人民为中心的发展思想，既要着力增加绿色优质畜产品供给，也要以粪污资源化利用为抓手，满足人民日益增长的优美生态环境需要；要紧紧抓住畜牧大县这个牛鼻子，优化布局、配套政策、完善机制，扎实推进粪污资源化

利用。各地和各级有关部门要着力抓好畜牧大县整治、责任落实、示范引导、技术支撑服务等重点工作，确保如期高质量完成粪污资源化利用目标，努力开创畜牧业现代化建设和绿色发展新局面。

链接:

http://www.moa.gov.cn/xw/zwdt/201804/t20180417_6140474.htm

10. 联合国粮农组织：埃及粮食和水资源安全将面临挑战

【新华社】新华社开罗5月15日电（记者郑凯伦）联合国粮食及农业组织驻埃及代表侯赛因·贾达因15日表示，人口增长给埃及粮食和水资源安全带来挑战。贾达因在当天举行的粮农组织埃及代表处成立40周年纪念活动上说，埃及目前有约一亿人口，预计2030年达到1.2亿、2050年超过1.5亿。“激增的人口将加速埃及自然资源的消耗，首当其冲的是水资源。目前埃及85%的水资源用于农业生产，当前低效的灌溉技术必须加以改进。”贾达因还说，部分尼罗河三角洲地区将随全球气候变暖沉入水下，埃及政府需及时提出可持续性的解决方案。联合国驻地协调员丁查德在活动上介绍说，农业在埃及国内生产总值中占比14%，农业产品占出口总额的12%，农业劳动者占劳动力的28%。在偏远和贫困地区，农业的主导地位更为突出，90%的偏远地区贫困人口从事农业。“在这些地方发展农业将为贫穷人口脱贫致富提供帮助。”

链接:

http://www.xinhuanet.com/world/2018-05/16/c_1122841264.htm

【研究报告】

1. Introducing perennial biomass crops into agricultural landscapes to address water quality challenges and provide other environmental services

发布源: OSTI.GOV

发布时间: 2017-11-29

摘要: The world is faced with a difficult multiple challenge of meeting nutritional, energy, and other basic needs, under a limited land and water budget, of between nine and ten billion people in the next three decades, mitigating impacts of climate change, and making agricultural production resilient. More productivity is expected from agricultural lands, but intensification of production could further impact the integrity of our finite surface water and groundwater resources. Integrating perennial bioenergy crops in agricultural lands could provide biomass for biofuel and potential improvements on the sustainability of commodity crop production. This article provides an overview of ways in which research has

shown that perennial bioenergy grasses and short rotation woody crops can be incorporated into agricultural production systems with reduced indirect land use change, while increasing water quality benefits. Current challenges and opportunities as well as future directions are also highlighted.

链接:

<http://agri.ckcest.cn/ass/a2da100c-21c6-445a-a779-eae1559273e8.pdf>

【文献速递】

1. A geogrid-based framework of agricultural zoning for planning and management of water & land resources: A case study of northwest arid region of China

作者: Jiang Yun; Zhang Qing-feng; Zhao Xi-ning; Li Wang; Zhang Xiang

文献源: Ecological Indicators,2018

摘要: Agricultural zoning is recognized as an effective approach to utilization of agricultural water & land resources (AWLR), especially in a large-scale region. The main objective of this work is to explore a new zoning method of classifying and dividing the AWLR of a larger area such as the Northwest Arid Region of China (NWAR). In this study, models of AWLR zoning of the NWAR were constructed. Data on 13 selected indicators were gathered from its 394 administrative counties, and processed and imported into 227100 Geogrid files. Then they were analyzed through four contradistinctive zoning approaches. And zoning results were tested and validated. The Geogrid-based PCA-SOFM scheme is the most effective, concise, and applicable. Finally, the NWAR was divided into 5 AWLR zones which were delineated according to the climate and geographic features and the administrative boundaries of counties or county-level districts. This work has established a novel methodological framework for AWLR zoning of a large-scale area.

2. Global land-water nexus: Agricultural land and freshwater use embodied in worldwide supply chains

作者: B. Chen; M. Y. Han; K. Peng; S. L. Zhou; L. Shao; et al.

文献源: Science of the Total Environment,2018

摘要: As agricultural land and freshwater inextricably interrelate and interact with each other, the conventional water and land policy in “silos” should give way to nexus thinking when formulating the land and water management strategies. This study constructs a systems multi-regional input-output (MRIO) model to expound global land-water nexus by

simultaneously tracking agricultural land and freshwater use flows along the global supply chains. Furthermore, land productivity and irrigation water requirements of 160 crops in different regions are investigated to reflect the land-water linkage. Results show that developed economies (e.g., USA and Japan) and major large developing economies (e.g., mainland China and India) are the overriding drivers of agricultural land and freshwater use globally. In general, significant net transfers of these two resources are identified from resource-rich and less-developed economies to resource-poor and more-developed economies. For some crops, blue water productivity is inversely related to land productivity, indicating that irrigation water consumption is sometimes at odds with land use. The results could stimulate international cooperation for sustainable land and freshwater management targeting on original suppliers and final consumers along the global supply chains.

3. From change to transition? Learning from environmental protection activities in

Sweden

作者: Karin Eksvärd; Kristina Marquardt

文献源: Agroecology and Sustainable Food Systems, 2018

摘要: The Swedish government accepts in principle that agriculture needs to move from being an activity that contributes to humankind's excess demand on the planet to become an activity that regenerates ecosystem services. The major tool for development of European agriculture is the Common Agricultural Policy (CAP) of the EU implemented in the member rural development programs (RDP). Swedish farmers are dependent on the subsidies and payments of the RDP yet many are very critical of the program, especially those with animals and semi-natural pastures. A study based on semistructured interviews with farmers in three districts in Sweden reveals the main reasons for their criticism to be: they feel trapped by regulations, powerless with respect to the controlling agency and lacking control of their finances. The study also identifies factors in the program that hinder the implementation of the sustainability goals of the CAP and RDP. The article recommends the adoption of guiding principles for facilitating transitions toward sustainable agriculture and emerging solutions to the challenges farmers experience.

4. Agricultural policy and climate change: An integrated assessment of the impacts on an agricultural area of Southern Italy

作者: Raffaele Cortignani; Gabriele Dono

文献源: Environmental Science and Policy,2018

摘要: The European Union (EU) has recently reformed its Common Agricultural Policy (CAP) and, in parallel, has completely abolished the production quotas for milk. These changes will have important consequences for the use of land, of inputs (i.e., water and chemicals) and on the economic performance of rural areas. It is of interest to evaluate the integrated impact of these modifications and of climate change (CC), since the latter could neutralize or reverse some desired effects of the former. For this purpose, this paper evaluates the potential impact of the abolition of milk quotas, as well as of the reform of the first pillar of CAP in two different climate scenarios (present and near future). A bio-economic model simulates the possible adaptation of various farm types in an agricultural area of Southern Italy to these changes, given the available technological options and current market conditions. The main results show that the considered policy changes have small positive impacts on economic and environmental factors of the study area. However, some farm types are more affected. CC can effectively attenuate or reverse several of those effects, especially in some farm types. These results can inform the planning of future changes to the CAP, which will have to act in the context of deeper climate alteration.

5. Assessment and prediction of environmental sustainability in China based on a modified ecological footprint model

作者: Zhaohua Wang; Lin Yang; Jianhua Yin; Bin Zhang

文献源: Resources, Conservation and Recycling,2018

摘要: This study analyses the environmental sustainability status of China using a modified ecological footprint (EF) method which takes into account the freshwater ecological footprint, improves the energy ecological footprint, and amends the equivalence factor and yield factor. Then the linear autoregressive integrated moving average (ARIMA) and non-linear artificial neural network (ANN) models are applied to predict future ecological security. The results show that: (1) The per capita EF increased by three times from 1978 to 2013, whereas the per capita ecological carrying capacity experienced only a slight increase although the equivalence and yield factors were both enhanced. (2) The 'degree of ecological security' appeared to show a tendency to increase, indicating that China is in a 'pretty unsafe' ecological state. (3) EF intensity, which is used to represent the resource consumption level corresponding to unit economic output, indicated that the utilisation ratio of Chinese natural resources was greatly enhanced during the study period. (4) The

ecological footprint diversity index, and ecological and economic coordination coefficient, peaked in the 1990s and then began to fall, indicating that China's ecological environment, as well as its coordination with the economy, was considered to be better in the 1990s but then gradually deteriorated. (5) The predictions of ARIMAANN model indicated that the degree of ecological security in China would reach an unsafe state in a few years if certain effective measures were not taken. These findings could be helpful for decision-makers as they strive to make a better package of plans to ensure an ecological balance and a more sustainable future.

6. 粮食供需关系变化新形势下转变农业生产方式研究

作者：胡冰川; 魏后凯; 韩磊

文献源：河北学刊,2018

摘要：中国粮食供需面临总量宽松与结构性矛盾突出共存的新形势,所以加快转变农业生产方式既是缓解粮食供需矛盾的内在需要,也是促进农业可持续发展的重要途径。当前,中国农业生产方式转变正处在环境宽松、转型有利的关键时期。新型农业生产方式追求农业绿色生产和可持续发展,注重满足质的需求,是以规模化、集约化、绿色化、工业化和社会化为基本特征的现代农业生产方式。在粮食供需关系变化新形势下,加快农业生产方式转变需要促进农业政策转型,加快农业科技创新,引导小农生产进入现代农业发展体系并建立现代农业发展示范体系。

7. 城乡边缘地带土地资源的利用与管理

作者：郭志远; 李斌

文献源：河南农业,2018

摘要：21世纪,随着我国城市化的不断推进,城乡边缘地带的土地需求日益增加,城乡边缘地带土地的供应与需求之间存在的冲突和矛盾愈演愈烈。因此,如何合理充分利用土地资源需要相关的管理人员加强研究,综合分析各方面的因素,设计出多种高效率的建设方案,最终实现城乡边缘地带土地资源的最大化利用,带动城乡地区的经济发展,提升全体人民的幸福指数。

8. 关于推进农业供给侧结构性改革的思考

作者：何保东

文献源：农业经济,2018

摘要：目前,由于我国城乡消费结构飞速提高,农业产业结构的发展速度已经难以跟上消

费的速度,农业经济的发展基础正在逐渐失去可持续性,农业产品的价格方面以及农业产业组织方面的竞争力不足,这让农业在可持续性上越发困难,并且农业相比起现代产业,其在创新能力发展以及创新元素融合方面也较为困难,如今如何推进农业供给侧结构的改革已经成为了农业工作人员最为重要的工作思考方向,本文将针对这方面进行初步的分析。

9. 吉林省资源、环境、生态保护和管理体制问题研究

作者: 李京芮; 孙旭

文献源: 吉林工程技术师范学院学报,2018

摘要: 当前,环境恶化等问题尤为突出,各种自然灾害频发,极端天气不断出现,雾霾极值屡被刷新。这是人类过度开发、浪费资源而招致的大自然对人类的惩罚。从资源过度开发与利用过程来看,由资源、环境和生态保护管理机制僵化带来的弊病显露无疑。吉林省要落实国家政策,改革资源环境管理体制的缺陷,完善立法体系、执法体系,建立鼓励机制,完善监督机构,提高公众参与度,以此促进资源环境问题的改善与解决。

10. 雄安新区的人口与水土资源承载力

作者: 封志明; 杨艳昭; 游珍

文献源: 中国科学院院刊,2018

摘要: 设立河北雄安新区,是以习近平同志为核心的党中央深入推进京津冀协调发展的历史性战略选择。雄安新区正处在规划建设阶段,亟待探明资源环境承载能力与保障水平,为新区建设提供科学依据和决策支持。文章立足雄安新区,放眼京津冀,基于人口分布及人粮、人水关系,定量评价并对比分析了雄安新区及其周边地区的人口与水土资源承载力。研究表明,雄安新区土地资源承载力优于周边地区,人粮关系协调,尚有一定的人口集聚空间;水资源承载力劣于周边地区,人水关系紧张,流域内配水和跨流域调水已成为必然。在此基础上,提出了促进人口合理布局,引导人口有序流动,以及提高和增强水土资源承载力的若干建议。

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