

## 《中国农业发展战略研究》专题快报

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### 【动态资讯】

#### 1. 青海省省长刘宁：顺乎规律 青海绿色发展提挡升级

【中国农业新闻网】2016年8月，习近平总书记视察青海时指出，青海最大的价值在生态、最大的责任在生态、最大的潜力也在生态，并要求青海扎扎实实推进生态环境保护。从生态立省战略提出，到明确建设生态文明先行区，到努力实现从经济小省向生态大省、生态强省的转变，再到以生态文明理念统领经济社会发展全局的重大决策，青海省历届党政领导班子，始终坚持一张蓝图绘到底，奋力将大美青海打造成美丽中国的“亮丽名片”。今年，青海省政府工作报告提出，顺乎规律的发展是最好的发展，要保持历史耐心和战略定力，矢志不渝践行“绿水青山就是金山银山”的理念，不断推动人与自然和谐共生，提挡升级绿色发展方式。围绕生态优先、绿色发展，全国人大代表、青海省省长刘宁在全国人大青海代表团开放日上提出，要顺乎规律，提挡升级青海绿色发展方式。绿色发展，关乎效率、关乎和谐、关乎可持续发展，是对传统经济社会发展模式的创新。青海虽然经济总量不大，但绿色GDP总量占有较大份额，目前已初步形成了以绿色能源、绿色产业、绿色消费、绿色农牧业为架构的绿色发展方式，初步实现了经济增长由要素驱动向要素与效率共同驱动、效率与创新联合发力的转变。

链接:

[http://www.farmer.com.cn/xwpd/jjsn/201903/t20190314\\_1437347.htm](http://www.farmer.com.cn/xwpd/jjsn/201903/t20190314_1437347.htm)

#### 2. A lawn is better than fertilizer for growing healthy blueberries

【EurekAlert!】Intercropping with grasses is an effective and sustainable alternative to chemical treatments for maximizing blueberry yield and antioxidant content in limey soils. Blueberries are prone to iron deficiency - and correcting it increases their health-enhancing antioxidant content, researchers have discovered. Published in *Frontiers in Plant Science*,

their study shows that growing grasses alongside blueberry plants corrects signs of iron deficiency, with associated improvements in berry quantity and quality. The effects are comparable to those seen following standard chemical treatment - providing a simpler, safer, cheaper and more sustainable strategy for blueberry farming on sub-optimal soils. All soils are rich in iron, but nearly all of it is insoluble. Iron is essential for the formation and function of plant molecules like chlorophyll that allow them to use energy, that's why iron deficiency shows up as yellowing leaves - and drastically reduces plant growth and yield. There are two approaches to correcting iron deficiency in blueberries: acidify the soil, or add synthetic iron chelators. Each has its drawbacks. Grasses - which are well-adapted to poor soils - can provide a sustainable, natural source of iron chelators via their roots when grown alongside fruiting plants. Intercropping with grass species has been shown to improve plant growth and fruit yield in olives, grapes, citrus varieties - and most recently, in blueberries.

链接:

[https://www.eurekalert.org/pub\\_releases/2019-03/f-hyl030619.php](https://www.eurekalert.org/pub_releases/2019-03/f-hyl030619.php)

### **3. Scientists warn about the dangerous interaction of plant protection products**

**【 EurekaAlert! 】** Pest control is one of the vital services provided by insects in agroecosystems. Natural methods relying on biological control agents, such as parasitoid wasps, represent a highly effective way to suppress crop pest populations. Conventional practices in agriculture typically involve applying various synthetic pesticides (e.g. insecticides, fungicides, herbicides) simultaneously, in the form of a tank-mixture, to protect crops. However, current standard practices in pesticide risk assessment on biocontrol insects only examine the effects of individual pesticides. Exposure to the fungicide tebuconazole alone did not seem to affect the parasitoid wasp populations, but combined application with thiacloprid synergistically increased the already toxic effect of this insecticide. The way these compounds act together is still not well understood, but the authors hope this work (along with several previously-published studies showing similar agrochemical synergism in bees) will influence the science and practice of pesticide risk assessment, and encourage a more integrated approach.

链接:

[https://www.eurekalert.org/pub\\_releases/2019-03/erc-sw031219.php](https://www.eurekalert.org/pub_releases/2019-03/erc-sw031219.php)

#### 4. 湖北省推进农业投入品减量行动

【中国农业新闻网】2月22日从省农业农村厅获悉，湖北省今年推进农业投入品减量行动，全面推行节肥、节药、节水等绿色生产技术，推动农业绿色发展和高质量发展。促进化肥减量增效，深入开展“化肥零增长行动”，保持化肥使用量负增长。根据区域特点，分作物“量身定制”一批化肥减量增效技术模式，建设一批化肥减量技术服务示范基地，普及化肥减量增效技术，增强科学施肥意识，为农民提供全程技术服务。加大化肥减量增效示范区建设力度，集成推广一次性施肥、机械施肥、水肥一体化等高效施肥方式，应用专用配方肥、缓控释肥料、水溶性肥料、生物肥料等新型肥料，带动新技术新产品推广应用。重点开展再生稻施肥、机械施肥等新模式。加强农企对接，逐步引导肥料企业参与科学施肥工作，推进科技成果转化。力争2019年，全省主要农作物测土配方肥技术覆盖率达94%以上，化肥减量增效示范面积5000万亩次以上，化肥使用量保持负增长。围绕农药减量控害增效目标，深入开展农药使用量零增长行动。2019年全省主要粮食作物病虫害绿色防控面积力争达3000万亩，同比增加10%。全省各地将进一步加强监测预警、开展农药减量示范、扩大绿色防控面积、推进统防统治、加强农药监管，重点在“控、替、精、统”上下功夫，集中研究推广新技术、新药剂、新施药器械、新防控服务模式，确保全年农药使用量“零增长”。

链接:

[http://www.farmer.com.cn/jjpd/nz/nzdt/201903/t20190312\\_1436993.htm](http://www.farmer.com.cn/jjpd/nz/nzdt/201903/t20190312_1436993.htm)

#### 5. 打造“三农”研究一流智库 推动乡村振兴战略更好落实落地

【中华人民共和国农业农村部】本网讯 3月12日，中央农办、农业农村部乡村振兴专家咨询委员会成立大会暨第一次全体会议在京召开。中央农办主任、农业农村部部长韩长赋在会上强调，要深入学习贯彻习近平总书记关于“三农”工作重要论述，适应新形势新职责，加强专家咨询工作，不断提高谋划“三农”工作的战略性、前瞻性和科学性；要紧紧围绕乡村振兴中的重大问题，加强调查研究，把乡村振兴专家咨询委员会打造成“三农”研究的一流智库，为服务党和国家决策作出贡献，推动乡村振兴战略更好落实落地。会议指出，实施乡村振兴战略是党中央赋予“三农”战线的重要历史使命，对农业农村系统做好“三农”工作提出了更高要求。加强专家咨询工作是实施乡村振兴战略、中央农办发挥好决策参谋作用和农业农村部履职尽责的迫切需要。要充分发挥专家咨询委员会的智库作用，积极开展乡村振兴重大政策理论研究，助力加快建立健全城乡融合发展的体制机制和政策体系，不断增加乡村振兴的制度供给；广泛听取各方面意见，集中各方面智慧，拿出切实可行的政策举措，为党中央科学决策提供信息和智力支撑；利用专家咨询队伍研究问题、理清思路、谋划对策，更好履行中央赋予中央农办、农业农村部的职

责。实施乡村振兴战略需紧紧围绕粮食和重要农产品供给、乡村产业发展、脱贫攻坚与乡村振兴有效衔接、创新农业经营方式、农村土地制度改革、加强乡村治理、培养“一懂两爱”的“三农”工作队伍和农业农村优先发展等问题开展系统深入的研究。

链接:

[http://www.moa.gov.cn/xw/zwdt/201903/t20190312\\_6173595.htm](http://www.moa.gov.cn/xw/zwdt/201903/t20190312_6173595.htm)

## 6. Rainfall changes for key crops predicted even with reduced greenhouse gas emissions

**【EurekAlert!】** Even if humans radically reduce greenhouse gas emissions soon, important crop-growing regions of the world can expect changes to rainfall patterns by 2040. In fact, some regions are already experiencing new climatic regimes compared with just a generation ago. The study, published March 11 in Proceedings of the National Academy of Sciences, warns that up to 14 percent of land dedicated to wheat, maize, rice and soybean will be drier, while up to 31 percent will be wetter. Drier regions include Southwestern Australia, Southern Africa, southwestern South America, and the Mediterranean, according to the study. Wheat cropland in Central Mexico is also headed for a drier future. Wetter areas include Canada, Russia, India and the Eastern United States. The world's most populous countries - China and India - are among those that will have much wetter fields for the four crops included in the study, under any emission scenario. Percentage of cropland that will extend into high double-digits. Asia's other big rice producers, including Japan, Korea and the Philippines will have TOEs for increased rainfall. Wheat fields northern Europe, the United States, Canada and Russia will have higher precipitation. More precipitation may mean higher production, but when coupled with rising sea levels, higher temperatures and increased potential for flooding, higher production is not assured, said the authors. The precise nature of the changes is impossible to predict, what this study tells us is that adaptation needs to be agile. For the first time, we can tell what changes to be ready for - and when they are expected - in our major crop-growing regions.

链接:

[https://www.eurekalert.org/pub\\_releases/2019-03/icft-rcf030619.php](https://www.eurekalert.org/pub_releases/2019-03/icft-rcf030619.php)

## 7. Cash programs that help the poor can harm natural resources

**【EurekAlert!】** Poverty programs throughout the world that give poor families cash for food, education and health needs can have unintended consequences for communities that depend on natural resources, such as fish and trees. That is because the cash infusion that

makes the families wealthier can cause a ripple effect in the form of higher demand for, and impact on, the natural resources on which the local economy depends, UC Davis researchers suggest. "We are not saying the programs don't increase wealth, they just don't increase wealth as much as they could," said James N. Sanchirico, professor of environmental science and policy at UC Davis and a co-author of a study released this week. "We find that environmental degradation can reduce income benefits of these programs, particularly for individuals whose livelihoods depend directly on natural resources," said lead author Ted E. Gilliland. The results suggest that cash transfer programs need to be implemented in tandem with environmental policies. "Designers of these programs that do not think about how natural resources are integrated into local economies and don't manage their natural resources well could be undercutting the effectiveness of these programs," Sanchirico said. "It doesn't mean we should not have these programs, it just means that they could work better."

链接:

[https://www.eurekalert.org/pub\\_releases/2019-03/uoc--cpt031119.php](https://www.eurekalert.org/pub_releases/2019-03/uoc--cpt031119.php)

## 8. 通过综合配套措施 促进传统小农户向现代小农户转变

【中华人民共和国农业农村部】中办国办《关于促进小农户和现代农业发展有机衔接的意见》提出,加快构建扶持小农户发展的政策体系,促进传统小农户向现代小农户转变。这一提法具有重大理论和现实意义。一、当前和今后很长一个时期,传统小农户的家庭经营将是我国农业的主要经营方式。第三次全国农业普查数据显示,2016年全国有农业经营户20743万户,其中规模经营农户为398万户,仅占农业经营户的1.9%。另据调查,截至2016年底,把承包经营权部分或全部流转给新型农业经营主体的,大约7000多万户,流转的土地约4.7亿亩,占农民承包地总面积的35.1%。部分或全部流转承包经营权的农户,约占全部农户的30%。没有流转土地经营权的农户约1.6亿户,约占全部农户的70%。这些自己经营自家承包地的农户大部分劳动力老龄化,素质偏低。二、培育从事内涵式规模经营的现代小农户。中国农业要实现现代化,必须发展多种形式适度规模经营。三、将传统小农户纳入生产性社会化服务体系 and 现代农业经营体系之中。第一,实现产前、产中、产后的生产性社会化服务的规模效应,降低小规模经营主体获取社会化服务的成本。第二,农民合作社和龙头企业等新型农业经营主体要把小农户纳入现代农业经营体系之中。2019年中央1号文件指出:“落实扶持小农户和现代农业发展有机衔接的政策,完善‘农户+合作社’、‘农户+公司’利益联结机制。加快培育各类社会化服务组织,为一家一户提供全程社会化服务。”通过建立健全相关政策体系和创新相关组织制度,传统小

农户向现代小农户的转变就能具有坚实的制度基础和可靠的政策依托。

链接:

[http://www.moa.gov.cn/xw/zwdt/201903/t20190305\\_6173261.htm](http://www.moa.gov.cn/xw/zwdt/201903/t20190305_6173261.htm)

## 9. 山东深化农业供给侧结构性改革 打造乡村振兴齐鲁样板

【中华人民共和国农业农村部】本网讯 山东省认真贯彻落实中央决策部署，坚定扛起农业大省的责任，深化农业供给侧结构性改革，扎实推进新旧动能转换，力争农业高质量发展迈出新步伐。全力夺取夏粮首战告捷。针对今年小麦旺苗面积大、遭受旱冻灾害风险高等问题，山东省农业农村部门提早动手，制定全省小麦春季田间管理技术意见，加强麦田分类管理，强化技术指导服务，有效应对各类灾害，促进苗情转化升级，为夏粮丰收赢得主动。同时，认真做好春耕备播各项工作，备足备好农资农机，千方百计扩大春播作物面积，确保春播工作顺利开展。全力推动农业绿色高质高效发展。把维护国家粮食安全作为首要政治任务，层层落实粮食安全责任，在73个新增千亿斤粮食产能县整建制推进粮油绿色高质高效行动，重点发展适应市场需求的优质强筋小麦、高蛋白大豆、高油酸花生、特色杂粮杂豆和优质饲草料，力争全省粮食总产继续稳定在1000亿斤以上，优质强筋小麦面积比上年增加50万亩，优质高蛋白大豆面积增加50万亩，优质饲草料面积扩大到260万亩。全程推进农业标准化生产。着力构建与质量兴农、绿色兴农相适应的农业地方标准体系，力争到2020年制定完成地方标准和技术规程2600多项，确保主要农作物生产有标可依。全面打造农业产业化经营“升级版”。一是抓好主体培育。二是搭建平台载体。三是积极拓展产业功能。不断拉伸产业链条，推动产业链相加、价值链相乘、供应链相通“三链重构”，积极发展终端型、体验型、循环型、智慧型新产业新业态，不断开创乡村产业振兴的新路径、新境界。

链接:

[http://www.moa.gov.cn/xw/zwdt/201903/t20190305\\_6173259.htm](http://www.moa.gov.cn/xw/zwdt/201903/t20190305_6173259.htm)

## 10. Canadians' consumption of fruit and vegetables drops 13 percent in 11 years

【University of British Columbia】Two surveys taken 11 years apart show a 13-per-cent decrease in the amount of fruit and vegetables being consumed by Canadians, new UBC research has found. And while consumption of milk and dairy products also declined during the study period between 2004 and 2015, Canadians were eating more meat and alternatives in 2015 than they were a decade earlier. Researchers examined dietary data from two nationwide surveys involving more than 50,000 Canadians aged two and older. In both 2004 and 2015, respondents provided information about food and beverages they had

consumed in the past 24 hours. In 2007, the Canadian government released Eating Well with Canada's Food Guide. This version of the food guide included specific recommendations regarding amounts and types of foods to consume from each of the four core food groups (fruit and vegetables, grain products, milk and alternatives, meat and alternatives). Some of the shifts uncovered by the UBC study were in line with recommendations, but many healthy food groups recommended in the 2007 guide either saw no increase (whole fruit, whole grains, fish and shellfish) or decreased (vegetables, fluid milk). This suggests that more effective efforts are needed to address barriers to healthier diets among Canadians. "Poor diet quality is the number one contributor to the burden of chronic diseases in Canada," said Tugault-Lafleur.

链接:

<https://news.ubc.ca/2019/02/28/canadians-consumption-of-fruit-and-vegetables-drops-13-per-cent-in-11-years/>

### 【文献速递】

#### 1. Comprehensive evaluation of regional resources and environmental carrying capacity using a PS-DR-DP theoretical model

作者: WANG Liang; LIU Hui

文献源: Journal of Geographical Sciences,2019

摘要: The concepts of regional resources and environmental carrying capacity are important aspects of both academic inquiry and government policy. Although notable results have been achieved in terms of evaluating both these variables, most researchers have utilized a traditional analytical method that incorporates the "pressure-state-response" model. A new approach is proposed in this study for the comprehensive evaluation of regional resources and environmental carrying capacity; applying a "pressure-support", "destructiveness-resilience", and "degradation-promotion" ("PS-DR-DP") hexagon interaction theoretical model, we divided carrying capacity into these three pairs of interactive forces which correspond with resource supporting ability, environmental capacity, and risk-disaster resisting ability, respectively. Negative carrying capacity load in this context was defined to include pressure, destructiveness, and degradation, while support, resilience, and promotion comprised positive attributes. The status of regional carrying capacity was then determined via the ratio between positive and negative contribution values, expressed in terms of changes in both hexagonal shape and area that result from interactive forces. In order to test our "PS-DR-DP" theory-based model, we

carried out a further empirical study on Beijing over the period between 2010 and 2015. Analytical results also revealed that the city is now close to attaining a perfect state for both resources and environmental carrying capacity; the latter state in Beijing increased from 1.0143 to 1.1411 between 2010 and 2015, an improved carrying capacity despite the fact that population increased by two million. The average contribution value also reached 0.7025 in 2015, indicating that the city approached an optimal loading threshold at this time but still had space for additional carrying capacity. The findings of our analysis provide theoretical support to enable the city of Beijing to control population levels below 23 million by 2020.

链接:

<http://agri.ckcest.cn/file1/M00/06/60/Csgk0FyMmMGALTJzAAodfD4riYc901.pdf>

## 2. 资源环境承载力研究方法综述

作者: 黄贤金; 周艳

文献源: 中国环境管理,2018

摘要: 资源环境承载力是区域发展战略决策的基础,对指导区域可持续发展和服务国家战略需求具有重要意义。本文系统梳理了资源环境承载力评价从土地资源承载力向水资源承载力、环境承载力和生态承载力发展,再到近年来以土地开发强度为特征,以及基于供给能力的资源环境承载力评价兴起的历程。资源环境承载力评价从单一资源走向各类主要自然资源、环境要素及综合要素的承载力评价,研究方法不断完善。但目前资源环境承载力研究仍存在更多地关注承载的极限容量,对发展容量的关注不足;缺乏具有普适性、可推广的资源环境承载力评价理论及方法体系等问题,其研究仍面临严峻的挑战。未来资源环境承载力研究仍需在承载力从极限容量向发展容量转变,形成具有广泛指导意义的资源环境承载力评价方法体系,强化以空间开发利用为特征的资源环境承载力评价等方面的研究,以此深化资源环境承载力理论及实践应用研究,为区域可持续发展及服务国家战略提供支撑。

链接:

<http://agri.ckcest.cn/file1/M00/06/60/Csgk0FyMmSCAXARkAB55nZevR-g198.pdf>

## 3. 以色列水土资源高效利用经验对我国农业绿色发展的启示

作者: 易小燕; 吴勇; 尹昌斌, 等

文献源: 中国农业资源与区划,2018

摘要: [目的]水土资源高效利用是农业绿色发展的重点环节,以色列水土资源匮乏,却在

短短几十年迈入世界农业最发达的国家行列,因此,总结以色列的水土资源高效利用方式与经验,为我国农业绿色发展提供经验借鉴。[方法]文章运用实地调查法和归纳总结法,对以色列水土资源状况和农业水土资源利用状况进行了分析,总结归纳了以色列农业绿色发展的经验,提出了对我国农业绿色发展的启示。[结果]以色列水土资源高效利用的经验:(1)法律先行,强化水土资源管理,通过用水配额制、阶梯水价和水资源节约机制对水资源进行管理;通过加强审批、农业用地租赁制和多部门监管进行土地资源管理;(2)效率优先,大力发展节水农业,通过温室技术、滴管技术等提高水资源利用效率;(3)科技引领,不断创新资源高效利用技术;(4)公众参与,重视资源节约宣传教育。[结论]以色列水土资源高效利用启示我国农业绿色发展需要从以下几方面着手:(1)加强水土资源管理,建立自主节约机制;(2)大力推广应用资源节约新技术,提高资源利用效率;(3)加大科技创新与推广应用服务,实现农业绿色发展落地生根;(4)培养全民节约意识,全民推动绿色生产与生活方式。

链接:

[http://agri.ckcest.cn/file1/M00/06/60/Csgk0FyMmDCAfC5PAAgi\\_0xK\\_QM348.pdf](http://agri.ckcest.cn/file1/M00/06/60/Csgk0FyMmDCAfC5PAAgi_0xK_QM348.pdf)

#### **4. The BRICS and Africa's search for green growth, clean energy and sustainable development**

作者: Jing Gu; Neil Renwick; Lan Xue

文献源: Energy Policy,2018

摘要: The BRICS group of countries is widely held to offer the prospect of a new approach to sustainable development, renewable energy and green economic growth in Africa. This paper examines the BRICS' approach to renewable energy cooperation. It argues that, following a robust declaratory intent, implementation has taken time to achieve but there are signs of this coming on-stream. The New Development Bank can provide an effective intervention mechanism for the BRICS in Africa. New BRICS' policy initiatives suggest a more accelerated approach on renewable energy investment and technological cooperation. However, for the foreseeable future, individual members will be the drivers of the transfer process, particularly China and India. In terms of policy, the BRICS need to elaborate a specific strategy for renewable energy cooperation for both intra-BRICS and extra-BRICS development. Policies should also prioritise their pro-poor rationale and intent to widen energy access, achieve energy equity and overcome energy poverty. China and India have a significant existing and growing capacity to help move this forward.

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[http://agri.ckcest.cn/file1/M00/06/60/Csgk0FyMIMyAVvugAAS02r8\\_oQE763.pdf](http://agri.ckcest.cn/file1/M00/06/60/Csgk0FyMIMyAVvugAAS02r8_oQE763.pdf)

## 5. Wetland recreational agriculture: Balancing wetland conservation and agrodevelopment

作者: Xiaofei Yu; Mingju E; Mingyang Sun, et al.

文献源: Environmental Science and Policy,2018

摘要: Agricultural development at the expense of natural wetlands is an historic and global phenomenon. The wetland-agriculture shift in ecological interactions from competition to coexistence requires more sustainable modes of development to balance wetland conservation with agriculture. Considering that the recreational values of wetlands have been gaining recognition, the concepts, types, development pathways and management challenges of wetland recreational agriculture are proposed here based on an analysis of the evolution of wetland-agriculture interactions as well as lessons and experiences derived from case studies of wetland agriculture. Through learning from traditional eco-agricultural ideas and using modern agricultural technology, wetland recreational agriculture is committed to delivering multiple ecosystem services, increasing the profitability of wetland agriculture and realizing a balance between public and private interests. Six practical guidelines are proposed, and the joint action of local residents, enterprises, scientists, governments, NGOs, and volunteers is recommended to drive the implementation of specific wetland recreational agricultural practices.

链接:

<http://agri.ckcest.cn/file1/M00/06/60/Csgk0FyMksOAZrdwAAwK-JHRTx0895.pdf>

## 6. Does Global Agriculture Need Another Green Revolution?

作者: Danny Llewellyn

文献源: Engineering,2018

摘要: Farming and food production have traditionally benefited from innovative solutions that solved the challenges presented by nature and society. Now, more than ever, we need to embrace new science and technology and new funding models for agricultural research, so that we can continue to put food on our tables and clothes on our backs into the future. Everyone would agree that serious challenges lie ahead, which are not limited to climate change; however, our species has the ingenuity that is required to tackle these major challenges in order to ensure that we can equitably feed our growing population in a sustainable manner. The first GR was a game changer, and GR 2.0 needs to be even better; however, we must learn from our earlier mistakes and ensure that the GR 2.0 will not have the deleterious impacts on soil health, water health, biodiversity, or human health that

resulted from the massive intensification of agricultural production over the last few centuries.

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<http://agri.ckcest.cn/file1/M00/06/60/Csgk0FyMl6aAaFz4AAQRIMntVv8448.pdf>

## **7. Food and agricultural innovation pathways for prosperity**

作者: Thomas P. Tomich; Preetmoninder Lidder; Mariah Coley, et al.

文献源: Agricultural Systems,2019

摘要: This introduction to the special issue deploys a framework, inspired by realist synthesis and introduced in Section 1, that aims to untangle the contexts, mechanisms, and outcomes associated with investments that link poverty reduction and rural prosperity within a broad agri-food systems perspective. Section 2 considers changes in contexts: Where are agricultural research investments most likely to be an engine of poverty reduction? Over the past 25 years, there have been profound changes in the development context of most countries, necessitating an update on strategic insights for research investment priorities relevant for the economic, political, social, environmental, and structural realities of the early 21st Century. Section 2 briefly surveys changes in these structural aspects of poverty and development processes in low-income countries, with particular attention to new drivers (e.g., urbanization, climate change) that will be of increasing salience in the coming decades. In Section 3, we turn to mechanisms: What are the plausible impact pathways and what evidence exists to test their plausibility? Poor farmers in the developing world are often the stated focus of public sector agricultural research. However, farmers are not the only potential beneficiaries of agricultural research; rural landless laborers, stakeholders along food value chains, and the urban poor can also be major beneficiaries of such research. Thus, there are multiple, interacting pathways through which agricultural research can contribute to reductions in poverty and associated livelihood vulnerabilities. This paper introduces an ex ante set of 18 plausible impact pathways from agricultural research to rural prosperity outcomes, employing bibliometric methods to assess the evidence underpinning causal links. In Section 4, we revisit the concept of desired impacts: When we seek poverty reduction, what does that mean and what measures are needed to demonstrate impact? The papers in this special issue are intended to yield insights to inform improvements in agricultural research that seeks to reduce poverty. History indicates that equity of distribution of gains matters hugely, and

thus the questions of “who wins?” and “who loses?” must be addressed. Moreover, our understanding(s) of “poverty” and the intended outcomes of development investments have become much richer over the past 25 years, incorporating more nuance regarding gender, community differences, and fundamental reconsideration of the meaning of poverty and prosperity that are not captured by simple head count income or even living standard measures.

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<http://agri.ckcest.cn/file1/M00/06/60/Csgk0FyMlseAcF0DABI4Zz5L5DY739.pdf>

## **8. Ecosystem services management: an evaluation of green adaptations for urban development in Dhaka, Bangladesh**

作者: Naeema Jihan Zinia; Paul McShane

文献源: Landscape and Urban Planning,2018

摘要: We evaluated green adaptation strategies (parks, gardens, green roof, rainwater harvest, green façades/wall, porous pavement, and green and blue belts) in the context of urban development and potential climate change impacts for the city of Dhaka, Bangladesh. Our review of relevant literature revealed substantial environmental (cooler and cleaner environment), economic (reduced energy demand, avoided cost of drainage maintenance, increased land values) and social (higher social interaction, improved mental and physical health) benefits arising from the maintenance and development of ecosystem services in major cities. Our evaluation of green adaptation strategies was undertaken with household surveys in three wards of Dhaka, expert interviews, and our personal experiences. Rooftop gardens/agriculture had very high social acceptance (85%) and economic feasibility and was commonly practiced in Dhaka, particularly among house owners. Pocket park, green roof, rainwater harvest, green façades/wall, porous pavement, and community garden were all considered to be highly feasible for implementation with collective efforts but had lower social acceptance. Many respondents were unwilling to pay for green adaptation strategies even knowing their benefits. Our research revealed that successful implementation of beneficial green adaptation will require public participation at all stages supported through awareness raising campaigns. Enforcement of laws and strong commitment from the government was also considered to be beneficial. However, more transparent cost-benefit analyses promoting the conservation of ecosystem services is required, particularly for resource-poor Dhaka. Green adaptations make cities more resilient to pressures from

demographic change and climate change increasingly relevant in the developing world.

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<http://agri.ckcest.cn/file1/M00/06/60/Csgk0FyMIVqAYMpKAAIfWMhOVXI036.pdf>

### **9. Agricultural public policy: Green or sustainable?**

作者: L. Mouysset

文献源: Ecological Economics,2014

摘要: The future of agriculture constitutes a major challenge to the achievement of sustainable development. There are new perspectives on greening (focusing on ecological objectives) and sustainability (combining both ecological and social goals). Academic papers mainly study the ecological efficiency of agricultural public policies, while real public policies, such as the European Common Agricultural Policy, examine both ecological and social considerations. The objective of this paper is to consider economic, social and ecological objectives within the design of agricultural public policies. Using a bio-economic model applied to France, we compare different optimal public strategies. We show that, when the biodiversity objectives are either very limited or very demanding, grassland subsidies are the best instruments from both green and sustainable points of view. However for medium objectives, reducing crops subsidies is the cheapest way to green the CAP, while subsidies on grasslands are the only strategy from a sustainability perspective. Our work highlights new trade-offs related to policy implementation, such as social acceptance or technical difficulties, and the spatial equity of performance among regions.

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<http://agri.ckcest.cn/file1/M00/06/60/Csgk0FyMIEGALc9UABPLfb626WE120.pdf>

### **10. Investigating the limits of multifunctional agriculture as the dominant frame for Green Care in agriculture in Flanders and the Netherlands**

作者: Joost Dessein; Bettina B. Bock; Michiel P.M.M. de Krom

文献源: Journal of Rural Studies,2013

摘要: European agriculture and rural areas are facing multiple socio-economic changes, including a transition from an agriculture-based to a service-based economy. This restructuring forces agricultural and rural actor-networks to reformulate their (self-)definitions. One reformulation prevailing both in policy and scientific circles focuses on the notion of multifunctional agriculture (MFA). This paper critically examines the dominant

role that this notion has played in legitimising and shaping the pathways of rural development now present in Europe. More specifically, we examine MFA's role in promoting and organising Green Care as an innovative agricultural activity in the Netherlands and in Flanders (Belgium). We will demonstrate that the MFA frame does not sufficiently grasp the complex reality of Green Care developments. More importantly, the dominance of the MFA frame and related practices and institutional structures enable as well as constrain Green Care's continuity and further development.

链接:

<http://agri.ckcest.cn/file1/M00/06/60/Csgk0FyMk82ADFN0AAVILS9o69k517.pdf>

### 【统计数据】

#### 1. Farms and Land in Farms (2017 Summary)

发布源: USDA

发布时间: 2018-02-16

摘要: This annual full-text file presents data on the number of farms in operation, land in farms, and average size (acreage) of farms for individual states and the U.S.; includes economic sales class estimates for number of farms, land in farms, and average of farms for U.S. and selected states.

链接:

[http://agri.ckcest.cn/file1/M00/06/60/Csgk0Fx\\_gQ2AVghaAAqW2kgsqgk269.PDF](http://agri.ckcest.cn/file1/M00/06/60/Csgk0Fx_gQ2AVghaAAqW2kgsqgk269.PDF)

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