

《农业水土资源监控研究》专题快报

2020年第14期（总第27期）

中国工程科技知识中心农业分中心

中国农业科学院农业信息研究所

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【政策法规】

1. 《全国乡村产业发展规划（2020-2025年）》

发布源：农业农村部

发布时间：2020-07-16

摘要：产业兴旺是乡村振兴的重点，是解决农村一切问题的前提。乡村产业内涵丰富、类型多样，农产品加工业提升农业价值，乡村特色产业拓宽产业门类，休闲农业拓展农业功能，乡村新型服务业丰富业态类型，是提升农业、繁荣农村、富裕农民的产业。近年来，农村创新创业环境不断改善，新产业新业态大量涌现，乡村产业发展取得了积极成效。但存在产业链条较短、融合层次较浅、要素活力不足等问题，亟待加强引导、加快发展。根据《国务院关于促进乡村产业振兴的指导意见》要求，为加快发展以二三产业为重点的乡村产业，制定本规划。

链接:

<http://agri.ckcest.cn/file1/M00/01/04/Csgk0V8XFDeAbtFXA0XzYLYZ0y8654.pdf>

【动态资讯】

1. Making comprehensive water resources modeling more accessible

【International Institute for Applied Systems Analysis】A new large-scale, open source hydrological and water resources model developed at IIASA will support and enable different stakeholder groups and scientific communities to engage with a hydrological model and support their investigations.

链接:

<http://agri.ckcest.cn/file1/M00/01/04/Csgk0V8XF9GAKICEAAPUoPAPzQ0944.pdf>

2. Gene editing in food and farming: Risks and unexpected consequences

【 GMWATCH 】 A new report by the Canadian Biotechnology Action Network (CBAN) provides an overview of the new genetic engineering techniques of gene editing that are being explored in agriculture, and the range of risks and potential unexpected consequences that can arise from them. The purpose of our report is to support public discussions about the possible implications of using genetic engineering in food and farming. How should new genetic engineering technologies be used, and how should decisions about them be made? The core message of the report is that gene editing is genetic engineering, and that the process of gene editing creates genetic errors, leading to unexpected effects. Thus it should be rigorously regulated via thorough risk assessments and its products must be labelled.

链接:

<http://agri.ckcest.cn/file1/M00/01/04/Csgk0V8XGZyAb71IAA-iGItpsVg946.pdf>

3. Free trade can prevent hunger caused by future shifts in climate patterns

【 International Institute for Applied Systems Analysis 】 An international team of researchers investigated the effects of trade on hunger in the world as a result of climate induced crop yield changes. The conclusion is encouraging: international trade can compensate for regional reductions in agricultural production and reduce hunger when protectionist measures and other barriers to trade are eliminated.

链接:

<http://agri.ckcest.cn/file1/M00/01/04/Csgk0V8XGF2AakMTAAMVCnnRLi0962.pdf>

4. 中化阿里将联手共建10-15个数字农业示范基地

【中国农网】2020年,中化农业MAP与阿里数字农业再度携手,将在“新零售,新农业”融合背景下,基于数字农业战略规划,围绕大米、苹果、柑橘、葡萄、草莓、猕猴桃等品类,在数字农业基地打造、订单农业、直采基地、农产品品牌等方面开展深度合作,并计划在未来三年,在全国共建10-15个数字农业示范基地。

链接:

<http://agri.ckcest.cn/file1/M00/01/04/Csgk0V8XFUGANec2AAxHyKzHzEw650.pdf>

5. 湖南三县市与阿里共建数字乡村

【中国农网】7月17日,在杭州阿里巴巴西溪园区举办的湖南数字乡村峰会暨“湘品网上行”活动上,阿里和湖南省醴陵、南县、桂东三个县市,签订了数字乡村合作协议,共

建数字乡村样板县。阿里乡村以县域为单位，通过引入数字兴业、数字惠民、数字治理三大核心领域的解决方案与数字化产品，助力县域实现数字化转型，推动县域经济高质量发展、县域民生服务数字化升级和县域治理能力现代化。

链接:

<http://agri.ckcest.cn/file1/M00/01/04/Csgk0V8XFNuAAND7AAfsfvYVUJ0143.pdf>

6. 引进“精致农业”模式，打造闽台农业生态园

【《乡村振兴进行时》栏目】近年来，寿宁县清源镇实施“一地多用、一年多熟”的策略，充分利用季节差，发挥品种优势，加强品牌建设，推动农业产业发展。农业生态园的建设，也让村民们尝到了甜头，村民们不仅可以领到土地流转租金，还可以在园内打工领工资。园区通过基地示范、农户参与的模式，带动产业规模化生产，助推群众增收致富。

链接:

http://agri.ckcest.cn/file1/M00/01/04/Csgk0V8XFrGATduPAM4f7Mf_6cs520.pdf

7. 农业农村部 财政部发布2020年重点强农惠农政策

【农业农村部计划财务司】2020年，贯彻落实中央农村工作会议、中央1号文件、国务院政府工作报告，围绕实施乡村振兴战略，打赢脱贫攻坚战，如期实现全面小康目标，应对新冠肺炎疫情新形势，扎实做好“六稳”工作、落实“六保”任务，国家将继续加大支农投入，强化项目统筹整合，加快推进农业农村现代化。为便于广大农民和社会各界了解国家强农惠农政策，发挥政策引导的作用，发布了2020年农业农村部、财政部实施的重点支农政策。

链接:

<http://agri.ckcest.cn/file1/M00/01/04/Csgk0V8XFiKANhMVAAWiZ1SNy84292.pdf>

【文献速递】

1. Internet of Things (IoT): Opportunities, issues and challenges towards a smart and sustainable future

文献源: Journal of Cleaner Production,2020-07-19

摘要: The rapid development and implementation of smart and IoT (Internet of Things) based technologies have allowed for various possibilities in technological advancements for different aspects of life. The main goal of IoT technologies is to simplify processes in different fields, to ensure a better efficiency of systems (technologies or specific processes) and finally to improve life quality. Sustainability has become a key issue for population

where the dynamic development of IoT technologies is bringing different useful benefits, but this fast development must be carefully monitored and evaluated from an environmental point of view to limit the presence of harmful impacts and ensure the smart utilization of limited global resources. Significant research efforts are needed in the previous sense to carefully investigate the pros and cons of IoT technologies. This review editorial is partially directed on the research contributions presented at the 4th International Conference on Smart and Sustainable Technologies held in Split and Bol, Croatia, in 2019 (SpliTech2019) as well as on recent findings from literature. The SpliTech2019 conference was a valuable event that successfully linked different engineering professions, industrial experts and finally researchers from academia. The focus of the conference was directed towards key conference tracks such as Smart City, Energy/Environment, e-Health and Engineering Modelling. The research presented and discussed at the SpliTech2019 conference helped to understand the complex and intertwined effects of IoT technologies on societies and their potential effects on sustainability in general. Various application areas of IoT technologies were discussed as well as the progress made. Four main topical areas were discussed in the herein editorial, i.e. latest advancements in the further fields: (i) IoT technologies in Sustainable Energy and Environment, (ii) IoT enabled Smart City, (iii) E-health Ambient assisted living systems (iv) IoT technologies in Transportation and Low Carbon Products. The main outcomes of the review introductory article contributed to the better understanding of current technological progress in IoT application areas as well as the environmental implications linked with the increased application of IoT products.

链接:

<http://agri.ckcest.cn/file1/M00/01/05/Csgk0V8XIgyARCnmAGn4myd9bPE705.pdf>

2. Water rights shape crop yield and revenue volatility tradeoffs for adaptation in snow dependent systems

文献源: Nature,2020-07-10

摘要: Irrigated agriculture in snow-dependent regions contributes significantly to global food production. This study quantifies the impacts of climate change on irrigated agriculture in the snow-dependent Yakima River Basin (YRB) in the Pacific Northwest United States. Here we show that increasingly severe droughts and temperature driven reductions in growing season significantly reduces expected annual agricultural productivity. The overall reduction in mean annual productivity also dampens interannual yield variability, limiting

yield-driven revenue fluctuations. Our findings show that farmers who adapt to climate change by planting improved crop varieties may potentially increase their expected mean annual productivity in an altered climate, but remain strongly vulnerable to irrigation water shortages that substantially increase interannual yield variability (i.e., increasing revenue volatility). Our results underscore the importance for crop adaptation strategies to simultaneously capture the biophysical effects of warming as well as the institutional controls on water availability.

链接:

<http://agri.ckcest.cn/file1/M00/01/05/Csgk0V8XHDGAbBZFABoPqrjnlgS675.pdf>

3. Cognition of agriculture waste and payments for a circular agriculture model in Central China

文献源: Nature,2020-07-02

摘要: An integrated model combining multi-layer cradle to cradle approach: cost effective, technically sound, and bioenvironmental cutting-edge agricultural waste assessment technologies are lacking; to address this gap, the study proposes circular agriculture model (CAM) to support an integrated, bio-based, sustainable and broadly applicable rural society. CAM is an innovative, quasi-public product, bio-commodity, and concept. This study uses survey data on the Chinese province of Hubei to consider the returning of crop residues to the soil and manure for compost or biogas production (first-generation biorefinery). It explores farmers' environmental understanding and their willingness to pay (WTP) under a "polluter pays" principle. Factors, including education, infrastructure, trust in family-neighbors, and environmental attitudes, have a significant effect on WTP. Moreover, income, sustainability-recycling behavior, environmental perception, perceived usefulness-easiness, and trust-in-government positively affect farmers' WTP, whereas environmental attitude, intention, and selfishness have a negative effect. It, therefore, calls for the integration and cooperation of private, government, business, R&D and public welfare to value the combined rural traditions, religion, philosophy and belief, socio-psychological and altruistic values of local communities, which are essential for building trust and providing ecological security, tech spill-over, thereby indirectly helping farmers to restore their livelihoods.

链接:

<http://agri.ckcest.cn/file1/M00/01/05/Csgk0V8XG3aAY39bAB3mnujNIV0649.pdf>

4. Brazilian maize yields negatively affected by climate after land clearing

文献源: Nature,2020-06-29

摘要: Over 50% of the Brazilian Cerrado has been cleared, predominantly for agropastoral purposes. Here, we use the Weather Research and Forecasting model to run 15-year climate simulations across Brazil with six land-cover scenarios: (1) before extensive land clearing, (2) observed in 2016, (3) Cerrado replaced with single-cropped (soy) agriculture, (4) Cerrado replaced with double-cropped (soyamaize) agriculture, (5) eastern Amazon replaced with single-cropped agriculture and (6) eastern Amazon replaced with double-cropped agriculture. All land-clearing scenarios (26) contain significantly more growing season days with temperatures that exceed critical temperature thresholds for maize. Evaporative fraction significantly decreases across all land-clearing scenarios. Altered weather reduces maize yields between 6% and 8% compared with the before-extensive-land-clearing scenario; however, soy yields were not significantly affected. Our findings provide evidence that land clearing has degraded weather in the Brazilian Cerrado, undermining one of the main reasons for land clearing: rain-fed crop production.

链接:

<http://agri.ckcest.cn/file1/M00/01/05/Csgk0V8XIBKATNvdADrtaFvlyHA163.pdf>

5. 中国土地利用变化遥感研究的回顾与展望——基于陈述彭学术思想的引领

文献源: 地球信息科学学报,2020-04-25

摘要: 20世纪80年代以来中国社会经济快速发展带来的工业化、城市化正深刻影响着中国土地利用空间格局并影响到区域和国家生态与环境状况。在陈述彭先生指导下,1992年以来中国科学院建立起了完整的土地利用/覆盖变化遥感监测与数据分析技术路线,以及独特的分类体系和动态区划体系,奠定了中国LUCC信息平台的基础。本文在系统回顾陈述彭学术思想指导中国LUCC研究的基础上,面向国家需求与国际科技前沿梳理了我国LUCC研究的核心科学问题,并总结了中国科学院团队在最近20年LUCC研究取得的成果,包括土地利用/覆盖动态时空表征与分析模型、土地利用/覆盖变化过程及驱动机制、基于大数据和云计算的土地利用/覆盖变化探测方法、城市土地利用变化的区域气候/生态效应、气候变化与土地利用变化对农田生态系统的影响、林业活动的区域气候/生态效应,在此基础上对未来LUCC研究的前景进行了展望。

链接:

<http://agri.ckcest.cn/file1/M00/01/04/Csgk0V8XGpeAVkJhAAwN6fPu9CQ404.pdf>

6. 中国生态环境遥感四十年

文献源：地球信息科学学报,2020-04-25

摘要：生态环境是人类社会生存与发展的基础。快速发展的遥感技术显著推动着生态环境遥感监测能力的提升,有效支撑了国家生态文明建设。从1980年天津—渤海湾环境遥感试验开始,经历了近40年的发展,遥感监测技术已经广泛应用于生态、大气、水、土壤等生态环境保护各个方面,取得显著成效。本文回顾了我国生态环境遥感技术近40年的发展,通过典型或重要应用案例,系统梳理了遥感技术在生态环境监测、对地观测能力、支撑生态文明建设等方面应用的发展历程。生态环境遥感监测能力发展主要表现在应用领域逐步扩大、监测精度明显提升、监测时效大幅增强;对地观测能力发展主要分为国外卫星为主期、环境卫星发展期、高分卫星应用期3个阶段;支撑生态文明建设的重大事件主要包括全国生态状况定期调查评估、污染防治攻坚战、应急与监督执法等方面。本文结合国家战略和技术发展,对今后生态环境遥感的发展提出了一些思考。

链接:

<http://agri.ckcest.cn/file1/M00/01/04/Csgk0V8XGimAJjxAA3Hoqp3xew541.pdf>

7. A Multi-Temporal Landsat Data Analysis for Land-use/Land-cover Change in Haridwar Region using Remote Sensing Techniques

文献源：Procedia Computer Science,2020-04-20

摘要：LU/LC (land-use and land-cover) change detection information is essential for monitoring, planning, decision making, and socio-economic development. In the current study, multispectral Landsat-8 OLI, Landsat-7 ETM+, and Landsat-5 TM satellite imagery data has used in the Haridwar region for investigating the utility and possibility of remote sensing (RS) in LU/LC change assessment. After ensuring a ground survey with GPS, discussions with the individuals, and satisfactory literature-review, it has been found that RS can play a vital character in assessing the timely temporary changes in LU/LC of the Haridwar region. The satellite data of the different years 1996, 2003, 2010 and 2017 downloaded from USGS Earth Explorer. The satellite images of the selected study areas are categorized into seven different land use classes, viz. orchards, vegetation, agricultural land, rangeland, urban land, water bodies, and watershed. The pixel-based supervised classification method has performed 81.55%, 86.86%, 80.67%, and 93.00% accuracy using the Maximum Likelihood Classifier (MLC). The result of change detection of the LU/LC proved that the orchards area has been decreased very rapidly by 11806.65 ha (9.82%) and converted permanently in

urban and agricultural land due to urbanization and industrialization in Haridwar region from 1996 to 2017 year. While the remaining area of land use such as urban land, rangeland, and watershed have increased up to 3022.11 ha (2.51%), 10088.82 ha (8.39%), and 5191.47 ha (4.32%). The vegetation land and water body have been decreasing since 1996 up to 12856.41 ha (10.70%) and 802.63 ha (0.66%) respectively in 21 years (1996-2017). The overall results presented by this research may be useful for orchard monitoring and socio-economic development of the Haridwar region.

链接:

<http://agri.ckcest.cn/file1/M00/01/05/Csgk0V8Xlx-AUPMrABhWC-viLJ8418.pdf>

8. Artificial cognition for applications in smart agriculture: A comprehensive review

文献源: Artificial Intelligence in Agriculture,2020-04-20

摘要: Agriculture contributes to 6.4% of the entire world's economic production. In at least nine countries of the world, agriculture is the dominant sector of the economy. Agriculture not only provides the fuel for billions of people but also employment opportunities to a large number of people. The agricultural industries are seeking innovative approaches for improving crop yielding because of unpredictable climatic changes, the rapid increase in population growth and food security concerns. Thus, artificial intelligence in agriculture also called "Agriculture Intelligence" is progressively emerging as a part of the industry's technological revolution. The aim of this paper is to review various applications of agriculture intelligence such as precision farming, disease detection, and crop phenotyping with the help of numerous tools such as machine learning, deep learning, image processing, artificial neural network, deep learning, convolution neural network, Wireless Sensor Network (WSN) technology, wireless communication, robotics, Internet of Things (IoT), different genetic algorithms, fuzzy logic and computer vision to name a few. With the help of these technologies, the use of the colossal volume of chemicals can be used reduced, which would result in reduced expenditure improved soil fertility along with elevated productivity.

链接:

<http://agri.ckcest.cn/file1/M00/01/05/Csgk0V8XIoWAF6ZAFo5vzuUHI8363.pdf>

9. Smart Irrigation and Intrusions Detection in Agricultural Fields Using I.o.T.

文献源: Procedia Computer Science,2020-03-20

摘要: Agriculture plays an important role in the life span of human being not only for their survival but for the better economic growth of the country too. Precision agriculture is the new trending term in the field of technology whose main motive is to reduce the workload of the farmers and increase the productivity of the farms by using technologies like I.O.T, WSNs, Remote Sensing, Drone surveillance and many more. In this paper, we show the work done by our cost effective and reliable device whose aim is to irrigate fields only when there is a need of water and to provide information about detection of any intrusion in agricultural fields. The information is sent to the farmers by using cloud application. The performance of our system is measured in terms of intrusion detection and moisture of soil for irrigation.

链接:

<http://agri.ckcest.cn/file1/M00/01/05/Csgk0V8XIX-ADzFxAAp3U4L-7ok480.pdf>

10. Assessments on the impact of high-resolution-sensor pixel sizes for common agricultural policy and smart farming services in European regions

文献源: Computers and Electronics in Agriculture,2020-02-20

摘要: High-resolution (550 m) remote sensing satellite sensors provide a reliable, free and open data infrastructure for public and private agriculture and land use services. The further market penetration of these services critically depends on the fraction of agricultural fields and area that the services can cover. EU's Common Agricultural Policy (CAP) and smart farming services require a minimum of spectrally pure measurements per agricultural field. The impact of pixel size on the coverage of agriculture is studied in this paper considering present free and open optical sensors (Sentinel-2 and LANDSAT). It further studies the implications of the selection of spatial resolution of planned extensions of these sensors, i.e. the next generation of Sentinel-2, as well as Copernicus's hyperspectral CHIME and thermal LSTM future candidate missions. The paper analyzes the 2018 vector boundaries and crop types of 3.6 million agricultural fields in the German States of Bavaria and Lower Saxony and the Netherlands. The fields were rasterized using Sentinel-2 flight geometry and a pixel spacing of 5, 10, 20, 30 and 50 m. The study specifically considered: (1) fields with no pure pixel inside where no CAP services can be provided and (2) fields with less than 50 pure pixels inside, which is estimated to be the critical number for site-specific smart farming. The percentage of agricultural fields and agricultural area was determined for the main crop types. It shows, that with 10 m pixel spacing 24% and 20 m pixel spacing 1222% of the

agricultural fields in the study area do not contain a single pure spectral sample (Sentinel-2 case). This fraction decreases to 13% at 5 m spacing and increases to 2540% for 30 m (LANDSAT and CHIME) and 5070% for 50 m (LSTM) spacing. The percentage of fields with less than 50 pure pixels is 2050% at 10 m and 7085% at 20 m spacing (Sentinel-2). This fraction decreases to 512% for 5 m spacing and reaches the level of 9297% for 30 m (LANDSAT) and 99% for 50 m spacing (LSTM). Our analysis shows, that with a pixel spacing of 5 m the Sentinel-2-based site-specific smart farming services could increase their potential customer base from ~50% to ~90% of the agricultural fields and could potentially cover 99% of the regions' agricultural area. A 20 m pixel spacing would increase the agriculture area from 23% to 56% in the Central and Western European study regions on which the Copernicus hyperspectral candidate mission CHIME is capable to measure pure and full spectra for highly advanced future site-specific management services. LSTM would also profit from a spatial resolution of 30 m, which would raise coverage of the agricultural area in Central Europe with pure thermal measurements from 3% at 50 m to 23% at 30 m.

链接:

<http://agri.ckcest.cn/file1/M00/01/05/Csgk0V8XIMWAWAHjABxPlrmYlwlI595.pdf>

【研究报告】

1. 全球智慧农业领域学科态势分析报告（1995-2018年）

发布源：中国农业科学院农业信息研究所

发布时间：2020-07-20

摘要：1995-2018年全球智慧农业领域产出外文文献26495篇，其中中国作者发文4986篇，虽然我国发文时间较晚，发文量与全球产出仍有差距，但我国正不断加强该领域的研究工作，发文量呈逐年上升态势。美国在智慧农业领域有着绝对的优势，共发文6370篇，全部作者、第一作者、通讯作者发文量均排名第一；中国发文4986篇，全部作者、第一作者和通讯作者发文均排名第二，也是该领域研究比较先进的国家。全球智慧农业外文文献主要集中在遥感（5065篇）、环境科学（4961篇）、电气与电子工程（2992）、地学-多学科（2920篇）、农业-多学科（2428篇）、水资源（2293篇）、成像科学与摄像技术（2233篇）等学科，此外还有较多文献分布于多学科、跨学科领域。全球智慧农业领域发文量最高的机构是中国科学院，共发文1319篇，其第一作者和通讯作者发文量排名也是第一，第一作者发文量占比66.87%，是该领域实力强劲的科研机构；美国农业部农业研究院共发文851篇，第一作者和通讯作者发文量排名也是第二，第一作者发文量占比52.88%；排名第三的是中国农业大学，共发文346篇，其第一作者和通讯作者发文量也位列第三；研究发现智慧农业领域TOP10机构之间存在着密切的合作和交流关

系，中国科学院与北京师范大学、中国农业大学之间合作密切，分别合作发表外文文献81篇、14篇，该机构与TOP10海外机构都存在合作发文。

链接:

<http://agri.ckcest.cn/specialtyresources/industryreport/detail/e663a15e-566a-46ca-8249-1a5b4be50886.html>

2. 联合国发布《世界粮食安全和营养状况》报告

发布源：人民日报

发布时间：2020-07-15

摘要：由联合国粮食及农业组织、国际农业发展基金、联合国儿童基金会、联合国世界粮食计划署和世界卫生组织联手编写的最新版《世界粮食安全和营养状况》报告13日在罗马发布。报告预测，在全球范围内，由于新冠肺炎疫情引发的经济衰退，2020年饥饿人数至少新增约8300万，甚至可能新增1.32亿。报告指出，2019年全球有近6.9亿人遭受饥饿，与2018年相比增加1000万，与5年前相比增加近6000万。其中，亚洲饥饿人数最多，非洲饥饿人数增长最快。报告说，疫情使全球粮食体系的脆弱性凸显，需要各方共同应对。

链接:

<http://agri.ckcest.cn/file1/M00/01/05/Csgk0V8XJs2ABa1XALtpGMNbdel926.pdf>

【专业会议】

1. 2020中国新疆国际航空植保与智能装备博览会

发布源：中国新疆国际农业博览会

发布时间：2020-07-20

摘要：中国新疆国际农业博览会是中华人民共和国商务部批准、乌鲁木齐市人民政府支持、国家5A级农业认证、UFI国际展览业协会认证展会，定于2020年8月8-9日在新疆国际会展中心举办。展会以“智慧农业引领未来 丝路合作创新发展”为主题，观众6万人次。新疆、中亚等国家的农产品与食品加工技术设备进出口商、全疆及兵团14个师、174个团场的采购单位、10800家种植大户、8000个农业合作社以及哈萨克斯坦农场主联盟、有机种植协会、塔吉克斯坦农业经济协会、乌兹别克斯坦粮食工业联盟等组团到会参观采购。展会汇集国内外智能农业装备、航空植保、智慧农业、农业物联网、精准灌溉、设施园艺、植物工厂、新型肥料、种子、生物农药、农产品加工与包装技术等1500余家企业参展。6个展馆和1室外广场，展出面积达60000平米。同期举办“新疆丝路种业大会”、“田间品种展示”、“中国灌溉发展大会（新疆行）”、“‘一带一路’智慧农业植保飞防高峰

论坛”、“智慧农业科技创新推介单位评选”、“智慧农业示范基地观摩”等活动。

链接:

http://agri.ckcest.cn/file1/M00/01/05/Csgk0V8XJAKAMns9AB_DhsKIHx8753.pdf

2. 第五届中国南京国际智慧农业博览会

发布源：南京国际智慧农业博览会

发布时间：2020-07-15

摘要：自2016年起，中国（南京）国际智慧农业博览会已成功举办4届。累计吸引了中国农科院、南京农业大学、海尔、神州泰岳、欧姆龙、骑士、大疆无人机、浙江托普、华维节水、佳格大数据等1000多家国内外知名企业参展。美国、荷兰、日本、以色列、中国台湾等12个国家和地区参展参会。农业农村部副部长屈冬玉、农业农村部市场经济与信息司司长唐珂、农业农村部信息中心副主任杜维成、江苏省省长吴政隆、江苏省农业农村厅副厅长徐惠中、南京市农委原主任方中友均参观展会，并对展会给予高度评价。第五届中国（南京）国际智慧农业博览会将于2020年9月6-8日在南京国际博览中心举行。本届展会以“创新引领，智慧先行”为主题，主要展示近年来行业领先的智慧农业解决方案、农业品牌建设情况、现代农业科技成果、休闲农业等内容。

链接:

<http://agri.ckcest.cn/file1/M00/01/05/Csgk0V8XJIOALjzWAD7R-KX3j0E621.pdf>

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