

《“一带一路”战略背景下中国农业国际合作发展战略研究》 专题快报

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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

2019年3月20日

【动态资讯】

1. 2018年中国与欧亚地区十二国贸易数据

【中国一带一路网】2018年中国与欧亚地区国家贸易统计。制表：商务部欧亚司
链接:

<https://www.yidaiyilu.gov.cn/xwzx/hwxw/82895.htm>

2. 2018年过境哈萨克斯坦的铁路货运量增长10%

【中国一带一路网】国际文传电讯社阿斯塔纳报道，哈萨克斯坦国家铁路公司发布消息称，2018年过境哈萨克斯坦的铁路货运量达1700万吨，较上年增长10%。货运量增长的主要线路包括：俄罗斯至乌兹别克斯坦、伊朗、中国；中国至乌兹别克斯坦、吉尔吉斯斯坦、波兰；波兰至中国；韩国至乌兹别克斯坦等。主要运输产品包括铁矿石、原油、粮食、聚氯乙烯、肥料、黑金属、机械设备和白糖等。

链接:

<https://www.yidaiyilu.gov.cn/xwzx/hwxw/82899.htm>

3. What happens when you incentivize primary education in Uganda

【IFPRI】Most low income countries no longer charge fees for access to primary education, but primary completion rates remain far below one in many countries (Lucas and Mbiti 2014, World Bank 2018). Many schools still lack important instructional resources and educators often work in civil service systems that provide both robust employment protections and weak accountability practices. Teachers are frequently absent from school and are often not

fully engaged in teaching when present (Duflo et al. 20181, World Bank 2018).

链接:

<http://www.ifpri.org/blog/what-happens-when-you-incentivize-primary-education-uganda>

4. 中国已向布隆迪派遣四期援布农业专家组 杂交水稻改变布隆迪农民生活

【中国一带一路网】现年29岁的埃夫拉尔·恩达伊凯杰是布隆迪西北部布班扎省宁加村的农户，因为在中国杂交水稻示范生产中成绩突出，近日他获得中国驻布隆迪大使馆设立的“大使丰收奖”。恩达伊凯杰的经历是种植中国杂交水稻改变布隆迪农民生活的一个典型例子。中国援助农业专家组将中国杂交水稻引进布隆迪后，结合当地实际情况，在宁加村等地进行水稻试验。试验成功后，专家组于2018年9月开始指导宁加村村民在约48公顷的土地上进行成片示范生产，全村130多户共1000多名农民参加。

链接:

<https://www.yidaiyilu.gov.cn/xwzx/hwxw/82710.htm>

5. 2019年1月中菲贸易增长18.3% 中国是菲律宾第一大贸易伙伴

【中国一带一路网】据菲律宾统计署统计，2019年1月菲律宾货物进出口贸易总额143.14亿美元，同比增长2.9%。其中进口额90.35亿美元，同比增长5.8%；出口额52.79亿美元，同比下降1.7%；贸易逆差37.56亿美元。中国、日本、美国、韩国、中国香港是菲律宾前五大贸易伙伴。中国是菲律宾第一大贸易伙伴、第一大进口来源地、第四大出口目的地。

链接:

<https://www.yidaiyilu.gov.cn/xwzx/hwxw/82758.htm>

6. 哈萨克斯坦计划将对中国的小麦出口量提升到100万吨/年

【中国一带一路网】据《哈萨克斯坦真理报》3月14日报道，哈萨克斯坦农业部副部长伊萨耶娃当天在政府新闻发布会上表示，哈萨克斯坦计划开始向格鲁吉亚和伊朗出口小麦，并计划将对中国的小麦出口量提升到100万吨/年。伊萨耶娃表示，中亚和阿富汗是哈萨克斯坦小麦传统出口市场，对中国的出口也不断增长。今年1月，哈萨克斯坦与伊朗签署了小麦出口议定书，目前正与格鲁吉亚商谈小麦出口事宜。这两个国家过去曾是哈萨克斯坦重要的小麦出口市场，此后一度中断，现在有必要重新恢复。2018年哈萨克斯坦对中国小麦出口增长了3倍，计划在3年内将对华出口小麦增加到100万吨/年，目前

正与中方就自哈进口小麦配额等问题进行谈判。

链接:

<https://www.yidaiyilu.gov.cn/xwzx/hwxw/82750.htm>

7. Best Practices: Early Warning Early Action Systems

【IFPRI】 According to the 2018 Global Report on Food Crises, an estimated 124 million people worldwide face crisis-level or worse food insecurity, largely as a result of conflict and political instability or extreme weather events. To respond appropriately to such food crises, policymakers need reliable, timely information regarding food production and availability, food prices, and hunger levels. A number of early warning systems, such as those found in the Food Security Portal's Early Warning Hub, have been established to collect, analyze, and disseminate such information at global and national levels. By providing up-to-date information, these systems can help policymakers avoid potentially harmful policy reactions, such as food export bans, and reduce the risk of market volatility. But these systems can also go beyond just responding to crises. With timely data and information, policymakers may be able to anticipate food security crises, thus taking early action in order to mitigate the severity of their effects.

链接:

<http://www.foodsecurityportal.org/best-practices-early-warning-early-action-systems>

8. High-tech agriculture: farmers risk being 'locked in' to unsustainable practices

【the conversation】 Since World War II, Europe's agricultural sector has been very receptive to new technology, and the result has been staggering productivity gains for four generations, farmers have produced more than their parents did. At the same time, however, agricultural prices have fallen around the world and price subsidies have been cut. This has led to a cruel paradox: while farmers have never produced so much, many can no longer make a living from farming.

链接:

<https://theconversation.com/high-tech-agriculture-farmers-risk-being-locked-in-to-unsustainable-practices-112567>

9. Down on the Farm

【winton】 Although big generalised manias in financial instruments tend to receive the most press coverage, history is rife with speculative frenzies in specific agricultural commodities which, despite their smaller scale, have been just as ruinous for those involved. This section rounds up several such examples, ranging from the Merino mania of 180910 to the ostrich feather bubble of the late 19th and early 20th centuries.

链接:

<https://www.winton.com/longer-view/speculative-market-manias-booms-busts>

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

【Science Daily】 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. The study uses four emissions scenarios from low to high to predict time of emergence (TOE) of permanent precipitation changes, meaning the year by which precipitation changes remain permanently outside their historical variation in a specific location. The research shows that quick action on emissions -- in line with 2015's Paris Agreement -- would push TOE projections deeper into the future or reduce the size of affected areas.

链接:

<https://www.sciencedaily.com/releases/2019/03/190311173147.htm>

【文献速递】

1. Alternatives to calorie-based indicators of food security: An application of machine learning methods

作者: Marup Hossain;;Conner Mullally

文献源: Food Policy,2019

摘要: Identifying food insecure households in an accurate and cost-effective way is important for targeted food policy interventions. Since predictive accuracy depends partly on which indicators are used to identify food insecure households, it is important to assess the performance of indicators that are relatively easy and inexpensive to collect yet can

proxy for the “gold standard” food security indicator, calorie intake. We study the effectiveness of different variable combinations and methods in predicting calorie-based food security among poor households and communities in rural Bangladesh. We use basic household information as a benchmark set for predicting calorie-based food security. We then assess the gain in predictive power obtained by adding subjective food security indicators (e.g., self-reported days without sufficient food), the dietary diversity score (DDS), and the combination of both sets to our model of calorie-based food security. We apply machine learning as well as traditional econometric methods in estimation. We find that the overall predictive accuracy rises from 63% to 69% when we add the subjective and DDS sets to the benchmark set. Our study demonstrates that while alternative indicators and methods are not always accurate in predicting calorie intake, DDS related indicators do improve accuracy compared to a simple benchmark set.

链接:

<http://agri.ckcest.cn/file1/M00/06/61/Csgk0FyQtBSAAotnADhdYeT0OvE667.pdf>

2. Price Discovery in Commodity Futures and Cash Markets with Heterogeneous Agents

作者: Sophievan Huellen

文献源: Journal of International Money and Finance,2019

摘要: Since 2004, commodity futures markets have seen an unprecedented liquidity inflow linked to noise traders that follow global liquidity cycles rather than market fundamentals. This paper develops a price discovery model for commodity futures markets that incorporates noise trader effects by assuming two forms of limits to arbitrage: transaction costs and noise trader risk. It is shown that under these assumptions, commodity prices are driven by both market fundamentals and noise trader positions. Further, noise trader effects spill over to the cash market if limits to arbitrage due to transaction costs are imperfect but are confined to the futures market otherwise. The model is empirically tested using data from six grain and soft commodity markets.

链接:

<http://agri.ckcest.cn/file1/M00/06/61/Csgk0FyRneSAeWl8ABSP4z94MBs822.pdf>

3. Are USDA reports still news to changing crop markets?

作者: BernaKarali

文献源: Food Policy,2019

摘要： This study investigates whether major USDA reports still provide important news to changing crop markets. The news component of each report, or market “surprise,” is measured as a difference between the USDA estimate and its private expectation in corn, soybeans, and wheat markets. Changes in the relevance of USDA information are assessed by examining changes in the magnitude of market surprises and shifts in the futures price reaction to these surprises, which isolates the impact of each report. The stable size of market surprises over time suggests that competition from alternative data sources has not reduced the news component of USDA crop reports. Increasing price reaction to most reports, including those facing competition from alternative information sources, suggests that value of public information may be enhanced in uncertain markets affected by structural changes.

链接:

http://agri.ckcest.cn/file1/M00/06/61/Csgk0FyRn9SANKh0AC_3MUnLCBQ436.pdf

4. At Africa’s expense? Disaggregating the employment effects of Chinese mining operations in sub-Saharan Africa

作者： Tim Wegenast;;Mario Krauser

文献源： World Development,2019

摘要： China’s increasing investments in African countries have attracted considerable media attention and are the subject of scholarly debate. However, the socioeconomic impacts of China’s presence in Africa remain poorly understood. While some case studies maintain that Chinese projects have an enclave character and have largely failed to promote economic spillovers and local employment, others claim that Chinese activities have in fact encouraged infrastructural development and local economic activity. Focusing on the labor market effects of foreign mining investments in Africa, this article examines whether Chinese-controlled companies generate fewer local jobs compared to non-Chinese mining operations. Theoretically, we argue that—due to a competitive advantage in the employment of expatriate workers and a lower readiness to invest in local skill formation—Chinese firms are less likely to foster regional employment. Relying on novel data on the control-rights regimes of diamond, gold, and copper mines and georeferenced information from Afrobarometer surveys, we test the effect of mining contractors’ nationality on local employment rates. Our individual-level logistic models show that respondents living close to Chinese mining areas are more likely to report being

unemployed compared to individuals living in the vicinity of non-Chinese mining operations. Times-series cross-sectional estimations employing district-level data from the Demographic and Health Surveys for 20 sub-Saharan countries over the period 1997-2015 corroborate these findings. Furthermore, we find evidence that negative perceptions of China among indigenous populations are largely driven by the belief that Chinese workers are crowding out local employment.

链接:

<http://agri.ckcest.cn/file1/M00/06/61/Csgk0FyQsjmAMnXYABc3yLDekkg142.pdf>

5. 中国与丝绸之路沿线国家农产品国际竞争力研究——基于跨国动态面板数据

作者: 张丽君;;喻芬芬

文献源: 宏观经济研究,2019

摘要: "丝绸之路经济带"沿线国家农产品贸易市场潜力大,但中国农产品贸易逆差逐年扩大,如何提升中国与丝绸之路沿线国家农产品贸易国际竞争力成为关键。本文采用国际市场份额、贸易竞争力指数、显示对称性比较优势指数和显性竞争优势指数,测算了中国与丝绸之路沿线国家农产品的国际竞争力。进一步采用45个国家2000-2013年的面板数据,构建动态面板模型发现:大多数国家农产品国际竞争力较弱或处于劣势,对进口依赖程度较大;现代化生产要素和贸易开放度对农产品国际竞争力影响为正,传统的生产要素对农产品国际竞争力影响为负;农产品经济规模虽然有助于抢占国际市场和提升农产品的显性竞争优势,但是不一定会增强贸易结构和相对比较优势的竞争力。

链接:

<http://agri.ckcest.cn/file1/M00/06/60/Csgk0FyM466AKUu3ACNkGuwyMAE976.pdf>

6. 改革开放40年中国粮食安全国际合作发展及展望

作者: 王永春;;王秀东

文献源: 农业经济问题,2019

摘要: 加强粮食安全方面国际合作是促进解决世界性饥饿问题,推动中国全球化的重要一环。改革开放40年来,中国粮食贸易往来不断增加,对外经济和技术援助迅速发展,农业对外投资快速增长,但同时中国粮食安全国际合作也面临众多问题和挑战。本文在分析今后粮食安全国际合作发展趋势基础上,提出了未来推进人类命运共同体建设,提高中国国际话语权,充分利用国际组织平台加强三方合作以及支持企业行动促进民间合作等对

策建议。

链接:

<http://agri.ckcest.cn/file1/M00/06/60/Csgk0FyMYvOAE1wFAAR6s49yy2E788.pdf>

7. 未来农产品供求调控重点与思路途径

作者: 王小虎;;程广燕;;周琳;;黄家章;;唐振闯

文献源: 农业经济问题,2019

摘要: 综合国内实地调研与定量测算,未来农业供求调控面临消费需求数量增加质量提升、农业生产资源环境压力加大、国际成本与品质优势明显、国内市场价格波动频繁等新挑战。本文按照确保居民基本营养需求、保障国内供给安全、稳定农产品市场价格3大调控目标,依据膳食营养供给水平、居民食物消费偏好、国内资源保障水平、国际贸易风险程度、市场价格波动程度、人均农产品收益水平6大指标测算分析,遴选出3类、9种重点调控产品,并提出总体调控思路与具体途径。

链接:

<http://agri.ckcest.cn/file1/M00/06/60/Csgk0FyM5GuAFRk0AA5AJd-Q-YQ216.pdf>

8. “一带一路”农业科技走出去的政策思考

作者: 郭静利;;盛彩娇;;李思经

文献源: 中国农业科技导报,2019

摘要: 基于“一带一路”倡议,中国农业科技走出去以经济发展新常态下农业供给侧结构性改革为契机,统筹“一带一路”农产品多元市场,整合农业科技先进技术与装备,充分发挥我国农业科技比较优势,积极开拓“一带一路”农业科技走出去新领域。在已有中国对“一带一路”国家农业科技走出去如科技试验、示范、推广等基础上,分析了“一带一路”中国农业科技走出去的现状特点,梳理了中国农业科技走出去的问题,并提出对策建议,以期对“一带一路”中国农业科技走出去献计献策。

链接:

<http://agri.ckcest.cn/file1/M00/06/60/Csgk0FyMY8aAD0ZzAAVq9Vgmirk374.pdf>

9. Effectiveness of agronomic practices in dealing with climate change impacts in the Australian cotton industry — A simulation study

作者: Qunying Luo;;Michael Bange

文献源: Agricultural Systems,2019

摘要: Climate change is threatening the viability of cotton production in one of the world's

leading cotton regions but we do not know the magnitude of the threat and how effective the common management options are in responding to the threat. This study aims to answer these two questions by using a system modelling approach under various climate change and management scenarios. To construct local climate change scenarios (CCSs) for key cotton production areas in eastern Australia daily outputs from the CSIRO Conformal Cubic Atmospheric Model driven by four general circulation models (GCMs) were used in a stochastic weather generator, LARS-WG. These CCSs were then linked to a process-oriented cotton model (CSIRO OZCOT) to quantify the effect of changing planting times and irrigation scheduling triggers on cotton lint yield, water use, and water use efficiency (WUE) in 2030. We considered four planting times: normal planting, 15 days early, and 15 and 30 days later in both irrigated and rain-fed cotton. For irrigated cotton, we considered two soil water deficits (50 and 70 mm) below which an irrigation event was triggered in nine cotton production areas (Emerald, Dalby, St George, Goondiwindi, Moree, Bourke, Narrabri, Warren and Hillston). For rain-fed cotton, we considered three row configurations (solid, single skip and double skip) in four production areas: Emerald, Dalby, Moree and Narrabri.

链接:

<http://agri.ckcest.cn/file1/M00/06/61/Csgk0FyRnCiAlbqvABe8Azfc4yE832.pdf>

10. 中非农产品贸易的区域差异与空间集聚效应研究

作者: 朱月季;;周德翼;;汪普庆

文献源: 华中农业大学学报(社会科学版),2019

摘要: 运用描述性统计、多元化指数和均衡度指数系统分析入世以来中非农产品贸易在五大区域和国别上的分布差异及其演化趋势,并基于K-近邻空间权重矩阵的Moran's I指数测算了双边农产品贸易在空间上的集聚效应及其变动情况。结果表明:中非农产品贸易总量快速上升,但存在贸易进出口结构和区域分布的多重不平衡性;贸易国别的分散趋势大于五大区域上的分散趋势,中非农产品贸易国别多元化与均衡度正在逐步提升;中国在非洲的农产品贸易逐渐显现出正向的空间相关性,在全局空间上形成以高-高集聚为主的溢出效应,局部空间上主要以部分西非国家为轴心,在时序上保持相对稳定的正向聚集趋势。

链接:

<http://agri.ckcest.cn/file1/M00/06/60/Csgk0FyMZGeAFA9nAAbl36ITxug279.pdf>

【行业报告】

1. Egypt-Grain and Feed Annual 2019

发布源：USDA

发布时间：2019-03-14

摘要：FAS Cairo (Post) forecasts Egypt's wheat production in marketing year (MY) 2019/20 (July-June) to reach 8.77 million metric tons (MMT), up by almost four percent compared from 8.45 MMT in marketing year 2018/19. Post is forecasting Egypt's wheat imports in MY 2019/20 at 12.6 MMT, up 0.8 percent from the MY 2018/19 import figure of 12.5 million metric tons. Post forecasts Egypt's corn imports in MY 2019/20 at 9.5 MMT, up one percent from the MY 2018/19 estimate of 9.3 million metric tons. FAS Cairo forecasts Egypt's rice imports in MY 2019/20 at 500,000 metric tons.

链接:

<http://agri.ckcest.cn/file1/M00/06/61/Csgk0FyRoPOACyByAAba4vnSgRo888.pdf>

主编：赵瑞雪

地址：北京市海淀区中关村南大街12号

电话：010-82109658转806

本期编辑：陈芙蓉 董渤

邮编：100081

邮件地址：agri@ckcest.cn