

《“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

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【动态资讯】

1. Can governments promote homestead gardening at scale? The case of Ethiopia

【IFPRI】Eating fruits and vegetables can help ensure adequate nutrition and reduce the risk of heart disease, cancer, and obesity. Yet most people in lower income countries do not get the recommended daily servings of those foods, largely because they cannot afford them. One recent study of produce prices in 18 countries estimated that low-income people would need to spend half their daily income to get the recommended daily servings of fruits and vegetables.

链接:

<http://www.ifpri.org/blog/can-governments-promote-homestead-gardening-scale-case-ethiopia>

2. The global race for groundwater speeds up to feed agriculture's growing needs

【The conversation】Water is becoming a scarce resource in many parts of the world. Water tables have been falling in many regions for decades, particularly in areas with intensive agriculture. Wells are going dry and there are few long-term solutions available — a common stopgap has been to drill deeper wells. This is exactly what happened in California's Central Valley. The recent drought there prompted drilling of deeper and deeper water wells to support irrigated agriculture. Arizona is also looking to drill additional wells to tackle water shortages to support agriculture. The flow of the Colorado River, which supplies water to more than 44 million people across seven states, including Arizona, has dropped by close to 20 per cent in the past 15 years, lowering water levels in Lake Mead,

the river's largest reservoir.

链接:

<https://theconversation.com/the-global-race-for-groundwater-speeds-up-to-feed-agricultures-growing-needs-108458>

3. Why Nigeria should first support rice farmers before it cuts off imports

【The conversation】 Nigeria spends an average of US \$22 billion (₦7.92trn) each year on food imports. Its major food imports include wheat, sugar and fish. Another big import, rice, accounts for about US\$1.65 billion, or ₦0.59trn. Most of the country's rice is imported from Thailand and India. This has led analysts to predict it will be the world's second largest importer of rice after China in 2019.

链接:

<https://theconversation.com/why-nigeria-should-first-support-rice-farmers-before-it-cuts-off-imports-108095>

4. 农业部关门，美国农民120亿美元补贴搁浅

【中国农业信息网】由于中国政府受到贸易制裁，美国大豆对华销量大幅下滑。为弥补大豆价格大幅下跌所造成的损失，联邦政府曾承诺给予120亿美元的紧急补贴。美国全国农民联合会表示，对于正在焦急等待这笔援助款的成员来说，农业部办公室的关门是雪上加霜。在美国，农产品已经持续5年利润下滑，美国农民正面临着比一般挑战下更艰难的处境。全国约20万的家庭农场主和牧场主不同程度面临这一问题。

链接:

http://www.agri.cn/V20/ZX/sjny/201901/t20190114_6321466.htm

5. International food commodity prices hold steady in December

【FAO】 Global food prices held broadly stable in December, with rising international cereal prices offsetting declining sugar and dairy quotations, the Food and Agriculture Organization of the United Nations (FAO) said today. The FAO Food Price Index averaged 161.7 points in December, compared to a revised level of 161.6 points in the previous month. The index, which serves as an indicator of the monthly change in the international prices of a basket of food commodities, averaged 168.4 points for the whole of 2018, some 3.5 percent lower than in 2017 and almost 27 percent below the high point reached in 2011. While the international prices of all major cereals rose over the last year, those of the other tracked

commodities declined, with sugar dropping the most.

链接:

<http://www.fao.org/news/story/en/item/1176306/icode/>

6. How Is the Government Shutdown Affecting Agriculture?

【Modern Farmer】 As of Friday, the United States government has been shut down for a full week. The reasons why are not really our focus here; there are plenty of explainers for that. But given the government's prominence and importance in the American food production and regulation systems, any shutdown is a huge deal to us. So what's going on, exactly? A government shutdown is a complex thing, with certain programs losing funding, others able to spend out for a certain amount of time before their money runs out, and others declared essential and continuing basically as before. The USDA issued a press release on December 28th laying out some of the effects of a continuing shutdown.

链接:

https://modernfarmer.com/2019/01/how-is-the-government-shutdown-affecting-agriculture/?utm_source=Modern+Farmer+Newsletter&utm_campaign=9256d0fa97-EMAIL_CAMPAIGN_2018_12_13_09_58_COPY_01&utm_medium=email&utm_term=0_8b23c7adc9-9256d0fa97-14011387

7. 2019年展望：美国大豆农户可能获得数十亿美元贸易战补贴

【中国农业信息网】特朗普政府向遭受贸易战影响的农户提供紧急援助资金，将缓解一些农户受到的压力。这一农业援助项目旨在缓解美国农户因中国、墨西哥和其他国家对美国产品加征关税而遭受的影响。美国农业部预计美国大豆农户将会拿到约73亿美元的直接支付金。伊利诺斯州农场局局长Richard Guebert也是一名玉米、大豆和小麦种植户。他说，第二轮援助金将帮助那些处于非常困难时期的农户。虽然不会完全弥补农户的损失，但是可以让农户熬过这一年。

链接:

http://www.agri.cn/V20/ZX/sjny/201901/t20190109_6318985.htm

8. 中巴经济走廊将开启多方合作 沙特计划至少投资90亿美元

【中国一带一路网】新年伊始，沙特能源、工业与矿产大臣顾问艾罕默德·哈马德·哈马迪（Ahmed Hamed al-Gamdi）就率领一支由15人组成的沙特商工总会代表团对位于巴基斯坦的瓜达尔港和瓜达尔自由贸易区进行了商务考察。这是沙特商界首

次派团高调访问中巴经济走廊的旗舰项目。陪同访问的沙特驻巴基斯坦大使纳瓦夫·赛义德·马利基（Nawaf Saeed Al-Maliki）向媒体透露，沙特计划向中巴经济走廊投资90亿美元，并在瓜达尔投资建设大型炼厂。“沙特渴望在中巴经济走廊投资，其细节将很快公布。”

链接:

<https://www.yidaiyilu.gov.cn/xwzx/hwxw/76676.htm>

9. 中澳自贸协定开始第五轮产品降税 澳洲对华出口零关税产品达5418种

【中国一带一路网】2019年1月1日起，中澳自贸协定开始实施第五轮产品降税，澳大利亚对华出口的葡萄酒、三文鱼、龙虾、螃蟹、牡蛎、蜂蜜、樱桃等产品的关税降至零，澳洲出口中国的零关税产品增加至5418种；新鲜和冷冻牛肉的关税从7%-15%降至6%-12%。此外，澳大利亚与韩国自贸协定的第六轮关税削减也同时生效。澳洲出口至韩国的新鲜和冷冻羊肉的关税从11.2%降至9%。

链接:

<https://www.yidaiyilu.gov.cn/xwzx/hwxw/76679.htm>

10. 中国连续十年为巴西第一大贸易伙伴

【中国一带一路网】1月2日，巴西经济部数据显示，2018年，巴西对外贸易额4207亿美元，同比增长13.7%。其中，出口2395亿美元，同比增长9.6%；进口1812亿美元，同比增长19.7%。外贸顺差583亿美元，同比减少13.3%，为自1989年以来第二大顺差。大豆出口同比增长28.9%，初级产品出口占比从2017年的46.4%升至49.6%。

链接:

<https://www.yidaiyilu.gov.cn/xwzx/hwxw/76482.htm>

【文献速递】

1. Palm oil and dietary change: Application of an integrated macroeconomic, environmental, demographic, and health modelling framework for Thailand

作者: Henning Tarp Jensen;; Marcus R. Keogh-Brown

文献源: Food Policy, 2019

摘要: Palm oil is a cooking oil and food ingredient in widespread use in the global food system. However, as a highly saturated fat, palm oil consumption has been associated with negative effects on cardiovascular health, while large scale oil palm production has been linked to deforestation. We construct an innovative fully integrated

Macroeconomic-Environmental-Demographic-health (MED-health) model to undertake integrated health, environmental, and economic analyses of palm oil consumption and oil palm production in Thailand over the coming 20 years (2016-2035). In order to put a health and fiscal food policy perspective on policy priorities of future palm oil consumption growth, we model the implications of a 54% product-specific sales tax to achieve a halving of future energy intakes from palm cooking oil consumption. Total patient incidence and premature mortality from myocardial infarction and stroke decline by 0.030.16% and rural-urban equity in health and welfare improves in most regions. However, contrary to accepted wisdom, reduced oil palm production would not be environmentally beneficial in the Thailand case, since, once established, oil palms have favourable carbon sequestration characteristics compared to alternative uses of Thai cropland. The increased sales tax also provokes mixed economic impacts: While real GDP increases in a second-best Thai tax policy environment, relative consumption-to-investment price changes may reduce household welfare over extended periods unless accompanied by non-distortionary government compensation payments. Overall, our holistic approach demonstrates that product-specific fiscal food policy taxes may involve important trade-offs between nutrition, health, the economy, and the environment.

链接:

http://agri.ckcest.cn/file1/M00/06/5C/Csgk0FxC_oGAMWA-ACngNS4ZdMo916.pdf

2. 中国与“一带一路”沿线国家粮食贸易演变趋势及其虚拟耕地资源流量估算

作者: 孙致陆;;贾小玲;;李先德

文献源: 华中农业大学学报(社会科学版),2019

摘要: 中国与“一带一路”沿线国家共同开展互利共赢的更大范围、更高水平、更深层次农业合作,特别是加强与“一带一路”沿线主要粮食出口国经贸关系,对中国更好地充实耕地资源占有量和保障国家粮食安全战略实施有重要现实意义。以稻米、小麦、玉米和大豆为例,分析了1995—2016年中国与“一带一路”沿线国家粮食贸易演变趋势,并估算了双方粮食贸易的虚拟耕地资源流量。结果表明:中国与“一带一路”沿线国家粮食贸易量持续波动变化,2008年以来中国一直处于净进口地位且净进口量不断增长,2013年“一带一路”倡议提出以来增速更快且中国主要出口稻米、主要进口稻米和玉米;“一带一路”倡议提出前后的2008—2012年和2013—2016年,中国通过粮食贸易从“一带一路”沿线国家分别累计净进口虚拟耕地83.60万公顷和403.53万公顷,其中通过稻米贸易分别累计净进口虚拟

耕地73.84万公顷和239.74万公顷。

链接:

<http://agri.ckcest.cn/file1/M00/06/5C/Csgk0Fw-nJOANe1TAAouCSaAu7A847.pdf>

3. 中国对“一带一路”国家的农产品出口效率

作者: 赵金鑫;;田志宏

文献源: 西北农林科技大学学报(社会科学版),2019

摘要: 基于中国对“一带一路”国家农产品出口贸易的实际情况,利用时变随机前沿引力模型测算出中国对沿线各国的出口效率水平,分析了中国对沿线国家农产品出口效率的主要影响因素。结果表明:中国出口效率较高的主要是一些优势农产品,出口产品与沿线国家的需求之间尚存在较大的结构差异,中国还有进一步挖掘农产品出口的潜力和扩大市场的空间;中国对沿线各国的农产品出口效率存在较大的国别差异,其中对中东欧、南亚和部分中东国家的出口仍面临较大阻力,出口效率较低;沿线国家参与的区域自由贸易协定对中国出口效率所产生的影响较复杂,大阿拉伯自贸区 and 中部欧洲自贸区的建立显著提高了中国对其出口效率,而南亚自贸区及欧盟活跃的区域内贸易使得中国出口面临较大的挑战,中国-东盟自贸区在中国农产品出口效率方面未能起到预期的积极作用。

链接:

<http://agri.ckcest.cn/file1/M00/06/5C/Csgk0Fw-njGAPM0FAAUEHYhrunI317.pdf>

4. 改革开放四十年我国粮食安全:成就、问题及建议

作者: 王济民;;张灵静;;欧阳儒彬

文献源: 农业经济问题,2019

摘要: 改革开放40年来,我国粮食生产连上4亿吨、5亿吨和6亿吨三大台阶,取得举世瞩目的巨大成就,积累了诸多宝贵经验。但仍然存在结构性矛盾突出、环境压力增大和国际竞争力严重不足等问题。新时代“把中国人的饭碗牢牢端在自己手中”,必须走差别化竞争发展道路,着力推动粮食土地股份合作规模经营,加大粮食支持力度,大力推行种养结合发展模式,加快构建粮食安全监测预警体系。

链接:

<http://agri.ckcest.cn/file1/M00/06/5C/Csgk0Fw-zgyAOI3XAAMEo6U-yC0131.pdf>

5. Impacts of sustainability certification on farm income: Evidence from small-scale specialty green tea farmers in Vietnam

作者: Duc Tran;;Daisaku Goto

文献源: Food Policy,2019

摘要: Sustainability certification for small-scale farms has gained considerable momentum in developing countries. However, evidence on the economic benefits of certification schemes in the context of domestically consumed foods and beverages is scarce. This paper addresses this gap by evaluating the impacts of sustainability standards on the selling prices, sales, costs and net income of small-scale specialty green tea farming in Vietnam. We analyze original survey data on 401 smallholder green tea farmers and employ propensity score matching to mitigate self-selection bias. Our estimates reveal that certified green tea producers are able to obtain a higher average selling price and sales value. In addition, although certification leads to a dramatic increase in the costs of hired labor, net farm income is still significantly improved.

链接:

<http://agri.ckcest.cn/file1/M00/06/5C/Csgk0FxC9EaAMcqIAAsbl0RgY5w108.pdf>

6. Fish supply and demand for food security in Sub-Saharan Africa: An analysis of the Zambian fish sector

作者: Nhung Tran;;Long Chu

文献源: Marine Policy,2019

摘要: The demand for fish in Sub-Saharan Africa, as driven by the trend of diet-shift to fish, economic and demographic growth, outstrips supply. The resulting fish deficit is drawing attention of policy makers as it poses threats to economic stability as well as food security in the region. In this paper, a multi-species, multi-sector equilibrium model is developed and applied to Zambia as a case study to provide a tool for policy makers to examine the interaction between fish supply and demand. Projection results show that under business-as-usual scenario, the fish deficit in Zambia will increase and fish import will be a key contributor of fish for consumption in 2030. Increasing import tax will not solve the fish deficit due to a limited substitution between domestic and imported fish, while this tariff restriction may increase the fish price and affect poor people. The model results suggest that further investment in aquaculture could provide a solution if input markets for seed and feed are appropriately developed. Though calibrated to Zambia's fish sector, the model can be applied to analyze the outlook of fish sectors in other developing countries.

链接:

<http://agri.ckcest.cn/file1/M00/06/5C/Csgk0FxC9nyAY4wXAA-XUrqOI3w815.pdf>

7. Are agricultural researchers working on the right crops to enable food and nutrition security under future climates?

作者: Rhys Manners;;Jacobvan Etten

文献源: Global Environmental Change,2019

摘要: This study examined how crop-specific agricultural research investments can be prioritised to anticipate climate change impact on crops and to enable the production of more nutritious food. We used a simple crop modelling approach to derive expected future changes in regional climate suitability for crops. To determine if different starch-rich and pulse crops are currently underresearched or overresearched, we examined the global relation between crop-specific research output (number of publications) and the total nutrient output available for human consumption. Our analysis shows that current research investments are mostly associated with the current energy output of crops. Other things equal, investment levels tend to be slightly lower for crops better adapted to future climates and tend to decrease as crop nutrient richness increases. Among starch-rich crops, maize, barley, and rice receive substantially more research investment than justified by their current nutrient output. Sweetpotato, potato, and wheat show substantial current research deficits. Sweetpotato is most strongly underresearched in regions with improving climate suitability. For potato, research deficits occur in regions where these crops will experience less suitable climate conditions. For wheat, the deficits are distributed equally across regions with negative and positive climate effects. Three crops are significantly over-researched, namely maize, rice, and barley. Among pulses, cowpea, and lupin are generally overresearched. Common bean is highly underresearched, but these deficits concentrate in areas where it will likely suffer from climate change. Lentil, broad bean, and chickpea are underresearched, with deficits concentrating in regions where these crops will tend to benefit from future climates. Agricultural research investment allocations will need to consider additional factors not taken into account in this study, but our findings suggest that current allocations need reconsideration to support climate adaptation and enhance healthy human nutrition.

链接:

<http://agri.ckcest.cn/file1/M00/06/5C/Csgk0FxC8pSAaBMYACXn3dYgVYs418.pdf>

8. 中国与南亚国家农产品贸易发展的特征、问题与前景

作者: 郑国富

文献源: 世界农业,2019

摘要: 2001—2017年,中国与南亚国家农产品贸易合作成效显著,总量增扩,地位平稳,互补性增强,印度是中国与南亚国家农产品贸易合作的"领头羊";但仍存在着国别结构不合理、种类集中、附加值低、层次低下、关联度趋弱等问题。"一带一路"倡议为中国与南亚国家农产品贸易合作升级发展创造了历史机遇和区域平台。基于双方资源优势互补及国内农产品供需结构差异,未来中国与南亚国家农产品贸易合作潜力巨大、前景广阔。

链接:

<http://agri.ckcest.cn/file1/M00/06/5C/Csgk0Fw-n5yAB9GgAAAd9ux4JZkA362.pdf>

9. Ignorance Is Bliss? Experimental Evidence on Wine Produced from Grapes Irrigated with Recycled Water

作者: Tongzhe Li;;Jill J.McCluskey;;Kent D.Messer

文献源: Ecological Economics,2019

摘要: Agricultural industries are heavy users of water, which can be especially concerning in times of drought. One way to address agriculture's impact during droughts is to use recycled water for irrigation, but little is known about how consumers will respond to information disclosing that a food product was produced with recycled water. On the positive side, irrigation with recycled water is environmentally friendly. On the negative side, there is an "ick" factor that might repel consumers. We conducted a framed field experiment to evaluate consumers' responses to California and French wines made from grapes produced with recycled, conventional, and an unspecified type of water for irrigation. We find that consumers prefer not to know; their willingness to pay is greatest when the wine is made from grapes irrigated with an unspecified type of water. There is a discount for conventional irrigation water for both California and French wines, but it is statistically significant only for the California wines.

链接:

<http://agri.ckcest.cn/file1/M00/06/5C/Csgk0FxC-W2AMxs3AA3P08wxx3Q438.pdf>

10. 贸易便利化对农产品贸易成本的影响——基于中国与“一带一路”沿线国家的经验证据

作者: 刘宏曼;;王梦醒

文献源: 经济问题探索,2019

摘要: 利用世界银行Trade Costs Dataset数据库对中国的农产品贸易成本特征进行分析,在此基础上进一步研究贸易便利化对贸易成本的影响。研究发现:1995~2015年,中国与"

一带一路"沿线国家的农产品贸易成本总体呈下降趋势,但高于中国与美国、韩国和日本等贸易伙伴的农产品贸易成本;贸易便利化各项指标与双边农产品贸易成本负相关,其中经济自由度影响系数最大,其后依次为基础设施质量和代表边境管理水平的跨境前沿距离;其他引力变量,如地理距离和内陆国对双边农产品贸易成本具有显著的正向影响,发达水平、是否WTO成员国等对农产品贸易成本的影响显著为负。

链接:

<http://agri.ckcest.cn/file1/M00/06/5C/Csgk0Fw-zVmAQmunAAccZroFWb0846.pdf>

【研究报告】

1. A tool for climate smart crop insurance: Combining farmers' pictures with dynamic crop modelling for accurate yield estimation prior to harvest

发布源: IFPRI

发布时间: 2018-12

摘要: The study found that dynamic crop models have the accuracy to predict normal to high yields, but there are limits to their ability to capture low yields. On the other hand, the machine learning (CNN) model has better ability to capture lower yields. It is worth noting that the crop model only took into consideration mainly the weather data to predict yields; it is handicapped by the paucity of detailed management information deployed by farmers. However, the pictures sent by farmers reflected more yield-determining characteristics that reflected crop health and yield and that were then captured by the CNN. Finally, among the picture characteristics parameters, if "GCC & H" correlations are high, this could be a good indicator of low yield.

链接:

http://agri.ckcest.cn/file1/M00/06/5C/Csgk0FxDBpuAJns7AB_OIKXdFKE465.pdf

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