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RESEARCH ARTICLE

An index system for evaluation of agriculture green development at county level in China

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Supplementary materials

Table S1 Target value and source of the county AGD index system

Dimension	Primary indicator	Secondary indicator	Target value	Source
Food production	Production capacity	Agricultural land productivity	79,995 CNY·ha ⁻¹	National Agricultural Modernization Monitoring and Evaluation Index System Program
		Grain consumption per person	1345 kg	Food per capita in the United States in 2017
	Production condition	Cultivated land retention rate	100%	Measures for the Overall Management of Cross-Province Supplementary Cultivated Land
		Proportion of effective irrigated area	100%	Theoretical Optimal Value
		Mechanization rate of crop cultivation and harvest	90%	National Agricultural Modernization Monitoring and Evaluation Index System Program
Ecological environment	Ecological security	Proportion of ecological land	75%	Outline of the National General Plan for Land Use (2006–2020)
		Percentage of days with AQI below good	12.5%	Outline of the 14th Five-Year Plan for National Economic and Social Development of the People's Republic of China and the Long-Range Goals to 2035
		Electricity consumption per ten-thousand yuan of agricultural output value	54.7 kWh	The optimal value of agricultural green development pilot area
		Pesticide application intensity	2.6 kg·ha ⁻¹	Zhejiang Agricultural Green Development Pilot Zone Three-Year Action Plan (2018–2020)

Environmental pressure		N surplus per unit of cultivated land area	80 kg·ha ⁻¹	Nitrogen use efficiency, an indicator for the utilization of nitrogen in food systems
		P surplus per unit of cultivated land area	20 kg·ha ⁻¹	Environmental performance of agriculture in OECD countries since 1990
		Energy consumption per per ten-thousand yuan of agricultural output value	417 MJ	The optimal value of agricultural green development pilot area
		Livestock and poultry carrying capacity per unit of cultivated land area	2.7 LU·ha ⁻¹	Technical Guide for Estimating the Carrying Capacity of Livestock and Poultry Waste Land
		GHG emissions per 100 million yuan of agricultural value added	10.5 kt	Technical Guidelines for Green Agricultural Development 2018–2030
Socioeconomic	Agricultural economy	Disposable income of rural residents per person	44,000 yuan	Zhejiang Province to Implement Science and Technology to Strengthen Agricultural Machinery and Agriculture Action Plan to Significantly Improve Agricultural Production Efficiency (2021–2025)
		Agricultural labor productivity per person	6.5×10 ⁴ yuan	National Agricultural Modernization Monitoring and Evaluation Index System Program
		Proportion of agricultural financial input	20%	Effect and Scale Analysis of China's Fiscal Agricultural Input
	Rural society	Ratio of urban and rural disposable income	1.0	International Comparison of the Income Gap between Urban and Rural Residents
Engel's coefficient of rural residents		20%	FAO of the United Nations	
Educational level of rural labor force		90%	Comparison and Enlightenment of the Current Situation of the Educational Level of the Working Population in China and the United States	
