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## **MEASUREMENT AND ANALYSIS OF AGRICULTURAL WASTE RECYCLING EFFICIENCY**

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### **Abstract**

Research on the efficiency of agricultural waste recycling by farmers is helpful to help us understand the status of agricultural waste recycling based on micro perspective. From this perspective, this paper uses a three-stage Data Envelopment Analysis model to measure the agricultural waste recycling efficiency of peasant households. Through research, the concludes that the three-stage Data Envelopment Analysis model seems more scientific and rational to measure the performance of farmers' behaviors in this regard; there is a certain efficiency difference between sample farmers before and after adjustment of resource inputs, to a certain extent, which shows that the environmental variables and random factors have a significant impact on farmers' production behaviors; the farmers' waste recycling performance is also low, and the efficiency difference between sample farmers is marked, all of these may be attributed to a low production scale efficiency of peasant households.

*Key words:* agricultural waste recycling, efficiency, Three-Stage DEA (TSDEA) model

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