

# Analysis of the Factor Input Constraint on China's Grain Production

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**Key words:** Access to land; Land distribution; Land management; Land readjustment; grain production; factor input; influencing factors; cultivated land; food security

## SUMMARY

### Abstract

The purpose of this paper is to analyze China's grain production factor inputs since its reform and opening-up; find out the factors that affect China's food production at different stages. Method employed are Say's the three elements law and the grey correlation model. The result shows that the influencing factors in different phases are distinctly different. In the phase of household contract responsibility system effect from 1978 to 1989, the agricultural fiscal expenditure on food production has the greatest effect on the grain production; in the phase of the smoothly running institution from 1990 to 2001, the effective irrigation area has the greatest impact on the grain production; in the phase after China's joining the World Trade Organization from 2002 to 2011, the grain acreage has the greatest influence on grain production. In conclusion; from the perspective of factor input, China's grain production has been heavily dependent on the element of land, and the cultivated land is the most significant factor input that constraining China's grain production since the reform and opening up. Therefore, the most effective means is to break constraining effect of the cultivated land on grain production. It is considered helpful to reduce production factor's constraining effect on food supply by releasing the internal pressure of the cultivated land through the establishment of overseas farmland investment strategy in the implementation of the agriculture "Going out" strategy.

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