

## A Forecast Analysis on Global Production of Staple Crops

WenJun Zhang  
Sun Yat-sen (Zhongshan) University  
Guangzhou, China  
Email: [zhwj@mail.sysu.edu.cn](mailto:zhwj@mail.sysu.edu.cn)

GuoDao Liu  
Chinese Academy of Tropical Agricultural Sciences  
Hainan, China  
Email: [liuguodao@mail.sysu.edu.cn](mailto:liuguodao@mail.sysu.edu.cn)

ChangJun Bai  
Chinese Academy of Tropical Agricultural Sciences  
Hainan, China  
Email: [baichangjun@scuta.edu.cn](mailto:baichangjun@scuta.edu.cn)

**Abstract:** This study aims to make a long-term forecast analysis on global crops production and thus provide the publics, researchers, and decision-makers with basal data on global crops production in the future. Historical data on production and yield of cereals, paddy rice, wheat, vegetables & melons, and fruits for the world, developed countries, developing countries, Africa, Asia, Caribbean, Oceania, South America, North & Central America, and Europe are used to fit trajectories and make forecasts. The results demonstrate that GLM can generally fit trajectories of crops production. Forecasts of crops production and yield, per capita production, and crops composition for the world and various regions until 2030 are given and discussed in detail.