



Nanyang Technological University
ECONOMICS AND ECONOMIC GROWTH CENTRE Seminar Series

Economics and Economic Growth Centre invite you to a seminar by Prof YU Xiaohua

- Speaker** : **Prof YU Xiaohua**
*Chair
Agricultural Economics in
Developing and Transition Countries
University of Gottingen, Germany*
- Topic** : **"Crop Allocation and Increasing Returns to Fertilizer Use in China"**
- Chairperson** : **Prof BAO Te**
*Assistant Professor
Division of Economics
School of Social Sciences*
- Date** : **5 September 2017 (Tuesday)**
- Time** : **4.00pm to 5.00pm**
- Venue** : **HSS Meeting Room 6 (HSS-04-95)**
*School of Humanities and Social Sciences
Nanyang Technological University
14 Nanyang Drive, Singapore 637332*

About the Speaker:

Prof. Xiaohua YU is currently Chair of Agricultural Economics in Developing and Transition Countries at University of Gottingen. His research fields include agricultural economics, resource and environmental economics, development economics and behavioral economics. He serves at the associate editor of *Agricultural Economics*, *Journal of Integrative Agriculture* and *Agricultural and Resource Economics Review* among others, and published more than 40 papers in different international journals.

Abstract:

China is one of the largest users of chemical fertilizer in the world on a per hectare basis, and the single largest user in total as well. Although chemical fertilizers have helped China to feed the largest population in the world under limited cropland resources, high rates of fertilizer application have linked to low use efficiency and serious pollution problems. The objective of this study is to shed light on economic returns to chemical fertilizer in Chinese agriculture using farm household-level data from Jiangsu Province for 2004–2013. While the marginal product of fertilizer is declining at the intensive margin (for a specific crop), this may be offset by an increasing marginal product of fertilizer at the extensive margin (due to shifts in the structure of crops produced). We show in theory and through simulation analyses that it is possible for the marginal value product of fertilizer (MVP), when aggregated across crops, to exhibit a U-shaped pattern as fertilizer use increases. The empirical results are consistent with this hypothesis, with the marginal value product (MVP) of fertilizer following a U-shaped curve. These results may help explain China's high and increasing use of fertilizer.

Reservation:

Admission is free. Please reply to e-egc@ntu.edu.sg for any enquiries.