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INDIVIDUAL DECISIONS OR INSTITUTIONAL DYNAMICS?
REASONS FOR THE INTENSIVE USE OF FERTILIZER IN
EASTERN CHINA

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braucht eine nachhaltige Agrarentwicklung?“**

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Individual decisions or institutional dynamics?

Reasons for the intensive use of fertilizer in Eastern China

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Introduction

- Eutrophication of Lake Tai in the mid-east of China due to agricultural non-point-source pollution
- Chemical fertilizers as the major nitrogen input source
- Analysis of reasons and motivations in farmers' decision-making with respect to the use of chemical fertilizers



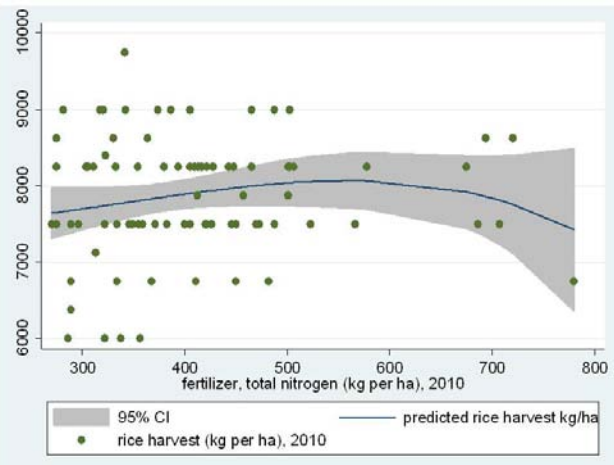
Theoretical Background

- Actors' behaviour reveals a wide range of reactions to the social environment
- Institutions as conventions, norms and externally sanctioned rules influence choices
- Actors' goals embody not only a desired outcome of certain behaviour, but also the means of goal pursuit

Empirics & Analysis

- Two empirical phases with semi-structured and in-depth interviews
- Distinction between goal orientation & focus and their reciprocity
 - Stochastic production function approach
 - Qualitative analysis based on Self-Determination Theory

Data



Actual and predicted yields of rice plotted against nitrogen use and 95% confidence intervals (CI)

Objective
 Improve the understanding of the farmers' decision-making process

Conclusions

- Overuse of fertilizer as shown by significantly negative elasticity of nitrogen use
- Goal orientation towards the maintenance of output levels in rice production
- Lack of trust in provided information by the extension service
- Dynamics between the gradual integration of institutions and the own perceived competence
- Not goal orientation itself, but the consequences of goal focus (process of goal pursuit)