

# **Yao Jingtao**

Modelling of Land Use Change and Carbon Effects.



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## **EDUCATION**

### **M. Sc. & Ph.D    China Agricultural University**

2013.09-present

Major: Soil Biology, Land use Analysis and Application, Land Management Issues, Land Resource and Protection, Agricultural Science & Technology, and Rural development, SAS Statistics Analysis Application, Land Use control, Geometrics and Application, Introduction to Dialectics of Nature, Resources and Environment Information Technology Development, Land Resources Management Issues ..

### **B. Sc.    China Agricultural University**

2009.08-2013.06

Major: Land resources Science, Fundamental of Soil Science and Soil Geography, land survey & evaluation, Economic Geography, Land information system, 3S technology synthesis practice, Land consolidation & Engineering Design, Land use planning practice, resources and environment field Practice.



## **RESEARCH EXPERIENCE**

2015.01-present, spatial optimizing land use allocation based on the simulation on carbon effects of land use change for low carbon Beijing, Natural Science Foundation of Beijing, China;

My Work: Developed an land use change predicting and scenario simulation model based on python language; estimate the spatial-temporal change of carbon emissions of human activities on the basis of 100\*100 m grids; Field investigate and agricultural survey on the topic of agricultural carbon effect in Beijing.

2013.09-present, Agricultural Land Use Pattern Evolution Simulation in Intensive Agricultural Region of North China Plain: by a Typical Household, NSFC, China;

My Work: Developed an agent based model to simulate and analyse the cultivation type change of farmer households in North China Plain; Field investigate and farmer survey in Luancheng county, Hebei Province, China.

2015.06-2015.09, Farmland Rehabilitation Strategy Research in North China Plain, CASS, China.

My Work: Lead a group to conduct farmer Survey in over 100 villages of 30 counties in North China Plain.



## **RESEARCH OUTPUT**

### **Recent Publications**

- 1, A gradient algorithm for land use transform matrix analysis and land use change simulation (Research on the Innovation and Development of Land Resources Science in China In a New Era, ISBN: 978755171345D)
- 2, Scenario simulation of land use change with cross-entropy optimization method (Abstract published in the annual conference of China Society of Natural Resources, 2016)

### **Patent of Inventions**

- 1, Land Use Change Predicting and Scenario Simulation Model V1.0 (under application)
- 2, Arable Land Quality Monitoring and Updating System V1.0 (No. 2016SR187822)

### **Important Awards**

- 1, 2016, Young Outstanding Paper Award in the annual conference of China Society of Natural Resources;
- 2, 2013, Louis Dreyfus Scholarship Award;
- 3, 2013, Outstanding graduates of China Agricultural University;
- 4, 2013-2016, 3-time of Scholarship Award for graduate student in China Agricultural University;
- 5, 2009-2013, 3-time of Scholarship Award for undergraduate student in China Agricultural University;



## **OTHER EXPERIENCE**

- 1, Assit in organizing the 6th Plenary Meeting of the Sino-EU Panel on Land and Soil (SEPLS);
- 2, Farmland Quality evaluation Programmes of 9 counties in Beijing, Inner Mongolia, and Hebei province, China;
- 3, Land Use General Planning Adjustment program in Balinzuo county, Chifent, Inner Mongolia, China;
- 4, Land reclamation, land development & land consolidation Planning Programs in Balinzuo and Aohan county, Inner Mongolia, China;
- 5, Land reclamation designing program of wind power construction in Fengning county, Hebei Province, China.