

Participatory Guarantee Systems and the Sustainability of Small Organic Farms (shengtai nongzhuang) in China

DAVIDSON

Coraline Xu, Guanming Qiao and Eriberto P. Lozada Jr.

Background

Chinese consumers struggle with the question “is it safe” in their everyday food purchasing decisions. This is the context behind the organic/local food movement in China – one that greatly impacts the small farms that struggle to survive economically, faced with competition from Chinese industrial agriculture. Large agro-industrial organic farms benefit from state certifications of food safety, while small organic farms seek to find ways to build trust among Chinese urbanites.

Objective. Based on fieldwork conducted between 2014-2016 in Shanghai and Beijing, we will explore the myriad, disparate (and often imported) structures and ideologies that food activists in Shanghai use to better connect urban consumers with rural farmers, such as IFOAM-Organics International’s Participatory Guarantee Systems.

Method:

Using **Social Network Analysis (SNA)**, however, we have found that the social context is crucial in determining the success (in terms of sustainability) of the implementation of trust-building mechanisms. We obtained the attendance list for various institutions involved in the smallholder organic agricultural market and incorporated them into matrices. Then we implemented this analysis with the help of functional programming language R.

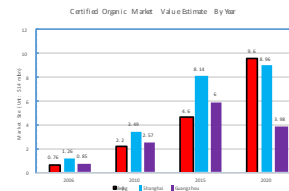


A second part of our method is **Participation-Based Observation** and semi-structured **interviews**. Through these interviews, we were able to obtain primary accounts from various perspectives. Our interviewees include food activist, farmers’ market organizer, small organic farmers, certificated farmers and university staff in rural reconstruction center.



Findings and Discussion:

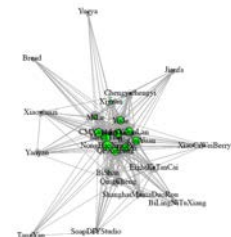
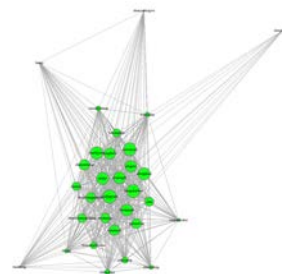
After we collected the information we gained from the interview, we started to form a comprehensive view of the local organic food market and began to focus on collecting quantitative proof of our hypothesis by using R to do social network analysis. Previously, most studies done by Chinese universities statistically showed that the level of economic development and education of urban denizens are the most significant factors positively related to the development of organic agriculture around Chinese megacities.



From this projection of the total purchase value of organic food in Chinese three major cities, Shanghai was supposed to have the highest level of organic agricultural development. But this is far from true.

We observed that instead of the level of economic development, three factors greatly influence the formation and development of alternative food systems in major cities.

- Regional Land Policies
- Historic Patterns of Land Distribution
- Consumer Trust Pattern and Network Density



We find the the density of the farmers’ market In Beijing is much higher than the one in Shanghai, which means that the social network

of organic farmers is tighter than that in Shanghai. It also explains why farmers’ market in Beijing is more successful and economic sustainable.

	Beijing	Shanghai
Density	16.23656	6.438746

Conclusion

By comparing and contrasting the small organic farms in Beijing and Shanghai, we came to the conclusion that the environment of Beijing food market is more sustainable than that in Shanghai. Despite the lack of evidence, it is possibly true that it is easier to build trust system between small organic farmers and customers in Beijing than in Shanghai.

Acknowledgement

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