Crop Insurance on Agrochemical Use by Farmers in the Manasi Watershed, Xinjiang, China

Research problem raised from:

Crop insurance is proposed to be considered as one policy tool in supporting agriculture and farmers' income against China's WTO commitment of "no price subsidy" to agriculture, while some previous studies suggesting negative impact on the environment through induced increasing application of agricultural chemicals.

Research objective：

To investigate if crop insurance does impact the environment negatively.

Research site:

Manasi watershed, Xinjiang, where cotton insurance has been in place for more than 20 years.

Major findings:

Under the current low-premium low-indemnity scheme, farmers may not have incentive to apply chemical fertilizers and plastic agro-films more intensively, as the potential compensation may not cover the additional risk. Rather, they are likely to take the insurance against big disasters, and treat it as substitution for pesticides. Therefore, crop insurance may even beneficial to the environment under such schemes.

Field investigation in Manasi watershed，xinjiang

Impact on policy process:

Research findings were invited to present at a workshop jointly held by the Ministry of Agriculture and OECD, leading to the decision of extending crop insurance across whole China in 2-3 years.

Extended research:

A related research project, entitled "Agricultural insurance and sustainability development in agriculture", was granted by the National Natural Science Fund of China as an extension of the EEPSEA sponsored project. As a result, some of the outcomes may be considered as a joint output of the two projects.

Outcomes

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1）Publications：Altogether, 2 books and 11 papers have been published based on findings of two projects.

2）Ph.D. theses：Three Ph.D. theses were outcomes of the two projects, and one of them was selected by the College of Economics & Management for publication.

3）Awards：Research grant: 140,000 RMB from the National Natural Science Fund of China;
Best Ph.D. Theses: two of the three theses were awarded the honor by the Provincial Academic Degree Commission;
A Second Class Best Research Award was granted by the National Ministry of Education.

4）Academic career：Three of the team members obtained academic positions after completion of the project and their Ph.D. programs: Li Xing: Chinese Academy of Agricultural Sciences; Manxiu Ning: Fuzhou University;Xiangyu Sun: China Information Science & Tech. University.

5) Consultations: Two insurance companies have requested consultations:Endurance based in New York, US;AON-Asia based in Hong Kong.

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