



**AgEcon** SEARCH  
RESEARCH IN AGRICULTURAL & APPLIED ECONOMICS

*The World's Largest Open Access Agricultural & Applied Economics Digital Library*

**This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.**

**Help ensure our sustainability.**

Give to AgEcon Search

AgEcon Search

<http://ageconsearch.umn.edu>

[aesearch@umn.edu](mailto:aesearch@umn.edu)

*Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.*

*No endorsement of AgEcon Search or its fundraising activities by the author(s) of the following work or their employer(s) is intended or implied.*

# Researches on Agricultural Cooperative Economic Organization Promoting Agricultural Insurance Development

WANG Xiu-fen\* , LI Mao-song

Institute of Agricultural Resources and Agricultural Regionalization, Chinese Academy of Agricultural Sciences, Beijing 100081, China

**Abstract** The advantages of cooperative economic organization being the effective carrier of agricultural insurance development are analyzed. Firstly, cooperative economic organization promotes scale management and solves the problem of decentralized operation of small households. Secondly, cooperative economic organization can settle the problem of peasants' low systematization. Thirdly, cooperative economic organization can largely reduce the costs of agricultural insurance operation. Fourthly, cooperative organization decreases moral risks as well as adverse selection to some extent. Lastly, cooperative organization, to a certain degree, reduces the risks of agricultural production and increases the insurability of agricultural risks. Meanwhile, limitations of agricultural cooperative economic organization being the carrier of agricultural insurance operation are pointed out. Firstly, cooperative economic organization has limited coverage and small size of organization, which is harmful to the diversification of agricultural risks. Secondly, cooperative economic organization lacks capital funds and its development is not standard, which is not perfect for the function exertion as a carrier. Lastly, members of professional cooperative organization have low cultural qualities, which restrict the implementation of agricultural insurance. The modes of farmers' cooperative economic organization promoting agricultural insurance development are proposed, including mode of agricultural insurance cooperative ( mutual corporation ), mode of " leading enterprises ( companies ) + professional cooperative organization ( planting majors ) + insurance " and mode of professional cooperatives serving as agricultural insurance agent. Last of all, the promoting role of agricultural insurance in agricultural cooperative economic organization is briefly illustrated.

**Key words** Cooperative economic organization, Agricultural insurance, Development, China

Under the social background of global warming, there are a growing number of extreme weather-climate events. It is hard to understand the frequency and intensity of extreme meteorological disasters as well as the increasingly complicated regional distribution. And the damage caused by these disasters will be more serious, which will bring about severe impact on agriculture in China. As an effective means of scattering and transferring the risks, agricultural insurance has captured growing attention from the government sector. China Insurance Regulatory Commission hold a press conference in Beijing on October 23, 2004 and announced that pilot programs of agricultural insurance reform would be conducted in 9 provinces, including Shanghai, Jiangsu, Heilongjiang and Xinjiang, which marked the implementation of a new round pilot work of agricultural insurance in China. During the 7-year pilot work of agricultural insurance since 2004, agricultural insurance has achieved gradual fruits under the highly attention of governments at all levels. However, there are still difficulties and problems in various aspects. At present, the contradiction between the agricultural scattered management mode with single peasant households as the subject and the highly systematization of agricultural insurance is one of the primary factors restricting the large-scale promotion of agricultural insurance. And the development of

agricultural cooperative economic organization is an effective means in solving the conflict. The writer analyzed both the advantages and disadvantages of agricultural cooperative organization as a carrier of organizations at grass-root level of agricultural insurance from various perspectives and further summarized the mode of agricultural cooperative economic organization promoting the development of agricultural insurance.

## 1 Advantages of cooperative economic organization as the effective carrier of agricultural insurance development

Wen Tiejun, the dean of School of Agriculture and Rural Development, Renmin University of China, pointed out in 2006 that the precondition of promoting agricultural insurance is the organization innovation in rural area. A relatively effective method is to weaken the transaction costs between policy agricultural insurance and scattered peasant households based on a comprehensive cooperative system with highly systematization. If the cooperative can be adopted as the organization carrier and problems, such as agricultural decentralized operation, low organization of farmers, asymmetrical information as well as relatively high transaction costs, be solved with the organization, maybe there will be the opportunity for insurance industry returning to peasants and serving " agriculture, countryside and farmers " .

**1.1 Cooperative economic organization promotes scale management and solves the problem of decentralized operation of small households** Agricultural insurance follows

Received: July 26, 2011 Accepted: August 22, 2011

Supported by the Basic Scientific Research Operational Funds in Central-level Public-interest Research Institutes (2011-23).

\* Corresponding author. E-mail: lims@caas.net.cn

"law of larger numbers", especially crop insurance which is specific to all households and has "extremely high" operating costs. If there is no support from blanket policy and related matching policies (including compulsory insurance and partly compulsory insurance), the coverage of insurance would not be further widened and it would be difficult to develop agricultural insurance business. The insurance companies require that households buy agricultural insurance uniformly with village or town as the unit. However, centralized and unified insurance is hard to be implemented under the circumstances of rural land contract liability system.

Developing farmers' cooperative economic organization is a key carrier to implement the scale management of land. As a beneficial association, cooperative economic organization, with the goal of seeking profits for all members, assists farmers to gradually enlarge the scale of management based on the principle of "conformity with law, compensation, voluntariness and specification", which effectively solves the contradiction that family decentralized management does not fit agricultural insurance. A typical case is that Xingnong Town of Baiquan County established Julong Farmers' Professional Association of Baiquan County with land as the share in 2008. Land area of scale management was 1 709 mu in 2008, while the profit of scale management within one production cycle was obvious and per capita income was three times of that of households who were not the members of the association. Land area of scale management of the association increased to 6 890 mu in 2009 and there were 31 established farmers' professional associations. With the guide of the cooperatives, the area of land circulation and moderate scale management was 1.3 million mu<sup>[1]</sup>. Xilian Town of Keshan County in Heilongjiang Province implemented the scale management of 91% of the whole land of the town through developing modernized professional cooperative of agricultural machinery<sup>[2]</sup>.

**1.2 Cooperative economic organization can settle the problem of peasants' low systemization** The instruction of the failed agricultural insurance in China includes peasants' low systemization while professional cooperative economic organization plays an apparent organizing role in agricultural industrial management. It has strong organizing ability among farmers. On the one hand, professional cooperative economic organization can improve farmers' recognition through publicity and education. On the other hand, it can conduct all-round negotiation with insurance companies on behalf of farmers in order to safeguard farmers' legal profits.

Rural cooperative economic organization severs as a bridge between farmers and agricultural insurance companies. In the past, due to the decentralized agricultural production, vast land and unshared housing, it was difficult to promote agricultural insurance. However, in the present age, the establishment of rural professional cooperatives assembles the decentralized peasant households. On the one hand, the sweeping service before, during and after production process is provided for farmers, the production scale is formed and the problems which cannot be integrated by the collective economic organiza-

tion in the community, have taken over by the state economic and technical section and solved by the single peasant household. On the other hand, it makes the promotion of centralized underwriting and claim of agricultural insurance convenient and saves the employees as well as the costs, which accords with the desire of farmers and agricultural insurance companies. Therefore, the rural professional cooperative is not only a new mode of rural cooperative economy but also a new carrier and breakthrough of agricultural insurance.

**1.3 Cooperative economic organization can largely reduce the costs of agricultural insurance operation** Objects of policy-supported agricultural insurance are usually the agro-products with mass cultivation and breeding. Yet, peasant households live and plant separately. If agricultural insurance is implemented with peasant household as the unit, the operating procedure will be complex and the processing fees as well as management costs will be high. The necessary rate of insurance coverage will be hard to guarantee even though there is financial support. However, the problem could be settled with the accession of trade association or farmers' professional cooperative organization. Agricultural insurance is implemented with the joint efforts from the leading enterprises of agricultural industrialization and farmers' professional cooperative economic organization to solve a series of problems caused by farmers' low systemization, such as high costs and difficulties in claim for fixed damage, which saves the composite operating costs of insurance companies.

Anhua Agricultural Insurance Incorporated Company has made great achievement in this field. Since the company was established, it has depended on agricultural industrialized operating organizations like leading enterprises and farmers' professional cooperatives, underwritten the crop farming as well as breeding and provided insurance services for farmers through signing united insurance agreement and taking agricultural industrialized operating organizations as the carrier. For example, special maize has been underwritten through Jiliang Group. Tobacco leaves of order tobacco growers have been underwritten through the provincial tobacco companies. Chickens cultivated by the raising households have been underwritten by Deda Group Company. Strawberries have been underwritten through Changbai Ruixue Agricultural Incorporated Company. Live pigs have been underwritten through Fubang and Baixin as well as some other pig-raising cooperatives. Dairy cattle raised by order raising households have been underwritten through Guangze Dairy Company<sup>[3]</sup>, which avoids the direct transaction between insurance companies and scattered peasant households and significantly saves the operating costs.

**1.4 Cooperative organization decreases moral risks as well as adverse selection to some extent** The circumvention of moral risks and adverse selection is another puzzle in the operation of agricultural insurance. Experience at home and abroad reveals that both professional joint-stock agricultural insurance companies and policy-oriented agricultural insurance companies established directly by the government cannot effectively settle the pervasive problem of information asymmetry in

agricultural insurance operation and restrain moral risks as well as adverse selection. However, farmers' professional cooperative organization bases on volunteer participation of members, democratic management and equality of rights with the promotion of members' economic profits and living conditions as the aim to form an interest community. Within a cooperative organization, information transparency and asymmetry have been greatly improved and the system of mutual restraint as well as supervision among members has been built, which can reduce moral risks and adverse selection in agricultural insurance effectively.

**1.5 Cooperative organization, to a certain degree, reduces the risks of agricultural production and increases the insurability of agricultural risks** Members of the cooperative are proficient in agricultural techniques with a good understanding of the characters of local agricultural production and clear recognition as well as evaluation of various agricultural risks during agricultural production, which effectively changes the disorder and blindness of farmers' production in the past. Unified production is conducted according to the contracts through the cooperative. Unified means of production should be purchased before production to lower production costs. Whole technical service is to be provided freely depending on research institutes during the production and all products from the cooperative members are to be purchased in the form of cash according to orders after production. Through service in every section before, during and after production, the service system combining supply of high quality seed, scientific planting and breeding, scale management and storage selling together is formed, hence low risk probability in farmers' planting and breeding. Besides, with the assistance from industrial organization, insurance companies provide some technical guidance as well as service to promptly prevent disasters and further reduce the risk probability.

## 2 Limitations of agricultural cooperative economic organization being the carrier of agricultural insurance operation

Since 1980s, various forms of new agricultural cooperative economic organization have been booming with the development of market economy. Yet, there are all kinds of problems in the development of new professional cooperative organization and much immaturity as well as imperfection in promoting the development of agricultural insurance.

**2.1 Cooperative economic organization has limited coverage and small size of organization, which is harmful to the diversification of agricultural risks** Though rural cooperative economic organization has been developed to some degree, generally speaking, it has slow developing speed, low standard, small coverage and weak influence. Therefore, successful achievement has not been acquired in the whole development of agriculture as well as rural economy and effects have not been exerted. The coverage of agricultural insurance implemented by rural cooperative economic organization is quite limited. Meanwhile, since cooperative economic organization plant and operate similar products in the same region and insurance

objects are similar crops, livestock or agricultural products, both insurance objects and the confronted risks possess strong homogeneity. So, agricultural risks are difficult to be effectively diversified.

**2.2 Cooperative economic organization lacks capital funds and its development is not standard, which is not perfect for the function exertion as a carrier** It is generally accepted in the academic circles that the development of rural cooperative economic organization in China is not standard. In terms of being a carrier of agricultural insurance, the following points are the main factors which affect the function exertion. The first is shortage in capital funds. Funds of cooperative economic organization primarily come from the limited membership dues which are difficult to be collected. Due to shortage in funds, the development of cooperative economic organization itself is confronted with troubles, which makes some cooperative economic organizations incapable of providing service of advancing insurance premium for farmers and restricts its function exertion. And cooperative economic organization is incapable of providing effective service for members. The second is inadequate implementation of preferential policies. The current tax preferences of cooperative organization have not been fully implemented. For example, some cooperatives report that single peasant household marketing his own products need not pay tax while he should pay tax after establishing the cooperative and registering in the industry and commerce department, which adds the burden. There are even some regulations in very few places that cooperative organization cannot enjoy agricultural insurance, which makes it hard to solve the low capacity of risk resistance of cooperative organization and restricts the further development of farmers' cooperative economic organization.

**2.3 Members of professional cooperative organization have low cultural qualities, which restrict the implementation of agricultural insurance** Farmers' professional cooperative organizations are mass organizations established by farmers through voluntary union based on their own social economic interests. It is specified in the *Law of Farmers' Professional Cooperatives* that the percentage of farmers in cooperative members should not be less than 80%. Farmers are the subject of farmers' cooperative economic organization and the foundation of the existence of the cooperative. However, the scientific and cultural qualities of farmers in China are generally low. Population with primary and junior middle school education in rural area takes up roughly three quarters of the total population, which affects not only the development of farmers' professional cooperative organization but also farmers' acceptance of agricultural insurance.

Though there are still troubles and difficulties in the development of farmers' professional cooperative organization, there are tens of thousands of farmers' professional cooperative organizations throughout China which has exerted quite obvious leading impact on farmers. With the gradual improvement and perfection of farmers' professional cooperative organization, the driving and supporting role of this effective carrier in agricultural insurance will continue.

### 3 Mode of farmers' cooperative economic organization promoting agricultural insurance development

Farmers' cooperative economic organization is the inevitable result of agricultural marketization and industrialization management and the necessary choice of facing the increasingly fierce international as well as domestic competition and improving farmers' systemization. Over the past one hundred years or more, farmers' professional cooperative economic organization has overcome steady enhancement throughout the world, exerted crucial impact on agricultural development and become a basic experience of various countries in the world heading for agricultural modernization. Based on the international and domestic experience of agricultural insurance as well as the advantages of farmers' professional cooperative economic organization, farmers' professional cooperative economic organization can promote agricultural insurance development through the following modes.

**3.1 Mode of agricultural insurance cooperative (mutual corporation)** One of the cooperative modes of promoting agricultural insurance development is to build agricultural insurance cooperative or risk mutual cooperative. Agricultural insurance cooperative is the cooperative organization established based on farmers' voluntariness, which is the same as other agricultural cooperatives. This mode mainly possesses the following advantages. Firstly, since agricultural insurance cooperative (mutual cooperative) is an agricultural insurance organization established based on members' financial aid, the voluntary principle and mutual benefit with members being responsible for their profits and losses, risk sharing and benefits sharing, it can be flexibly operated and set up insurance types according to local circumstances. Secondly, the insurance cooperative is non-profit, so the rate can be reduced compared with profit-oriented insurance companies, which is beneficial to evoking farmers' motivation in insurance. Thirdly, the insurance applicant of agricultural insurance mutual cooperative is also the underwriter and the profit surplus of the insurance cooperative can be returned to the insured through writing off renewal premium. Therefore, the mutual benefit-based relationship between the insured and the insurance applicant is beneficial to forming the mutual supervisory mechanism, which can effectively restrain the adverse selection and moral risks. Fourthly, since the agricultural insurance mutual cooperative is established in the local place, operational expenditures like auxiliary expenses and agency fees are not required and it is convenient for farmers' insurance, which can reduce the costs of supervision and management of insurance operation effectively. Lastly, members of agricultural insurance mutual cooperative are familiar with the characteristics of local agricultural production and management and have more clear understandings as well as evaluation of various agricultural risks confronted by the cooperative and other insurance applicants, which is beneficial to conducting the underwriting, examination of the insurable objects, settlements of claims and risk management of agricultural insurance. A successful model of agricultural insurance mutual

cooperative in the world is in Japan and a relatively successful one in China at present is the grain association in Beijing.

**3.2 Mode of "leading enterprises (companies) + professional cooperative organization (planting majors) + insurance** The stub network of agricultural insurance of leading enterprises (companies) + professional cooperative (planting majors) is to be established and the new agricultural insurance mode bonded with agricultural industrialization and depended on leading enterprises should be developed to guide and encourage leading enterprises to subsidize peasant households in participating insurance. Leading enterprises exert obvious guiding and driving role in farmers' insurance. Firstly, leading enterprises require peasant households to cover insurance through contracts and agreements, which contributes to the expansion of insurance. Part of the joint venture agreements between leading enterprises and peasant households specify that unified insurance should be purchased. Secondly, allowance of insurance premium is provided for farmers to share farmers' burden of the insurance premium, which solves the problem of farmers' low capability of covering insurance to a certain degree. Some leading enterprises incorporate farmers' insurance premium into their own costs and do not collect from farmers while some others provide allowance for farmers' insurance premium. Lastly, relevant insurance service is provided for peasant households. Farmers' guidance administration is generally established in leading enterprises to assist farmers to underwrite, prevent disasters, prospect and settle claims while guiding farmers' operation. Generally speaking, when an insurance accident happens, leading enterprises and insurance companies will prospect and settle claims together and assist farmers to demand compensation from insurance companies and provide the damage evaluation. Leading enterprises (companies) and peasant households share benefits and risks together to form the pattern of insurance boosting production and production promoting insurance. This pattern protects the benefits of the general public to the maximum degree, builds a reasonable and impartial benefit connecting mechanism between the general public and enterprises and achieves the "win-win" goal.

**3.3 Mode of professional cooperatives serving as agricultural insurance agent** Various kinds of farmers' professional cooperatives provide professional service related to production for farmers and make full use of the organization advantages of the cooperative to provide agricultural insurance services. Thereby, basic agricultural insurance operation can be conducted by using the existing legalized organizations and the main tasks involve collecting insurance premium, dispensing indemnity and so on. For example, Rural Credit Cooperatives serve as the agricultural insurance agents. Rural Credit Cooperatives are the financial institutes with the soundest network and closest connection with farmers in the rural area. By using the website advantages and personnel advantages of the operating agencies in the rural area of Rural Credit Cooperatives, agricultural insurance business can be widely agented, which not only saves the operation costs of agricultural insurance but also promotes and perfects the function of rural financial system. And

other professional cooperative organizations also establish excellent connecting channels with farmers since they all formed based on farmers' voluntariness. Agricultural insurance business can be accepted by farmers more easily through their agent services.

## 4 Conclusion

Under the preconditions of solid household contract responsibility system, development of rural professional cooperative organization serves as an effective carrier for the future development of agricultural insurance in China. Conversely, development of agricultural insurance provides the guarantee for the healthy improvement of agricultural cooperatives. Undoubtedly, there are various kinds of troubles in the development of agricultural insurance as well as agricultural economic cooperative organization. In order to actively support the healthy improvement of agricultural professional cooperative, agricultural insurance system need to be perfected gradually, which means that insurance products should be designed according to the actual situations of different cooperative organizations. More comprehensive, considerate and professional insurance services should be provided for rural professional cooperative organizations to extend agricultural insurance to each section of agricultural industrialization production and management as well as every corner of the countryside, which helps farmers truly enjoy insurance benefits. Similarly, to effectively exert the function of agricultural insurance as an effective carrier, there is big room for perfecting agricultural cooperative economic organization. Luckily, with the quickening of agricultural industrialization, farmers' professional cooperative organization and agricultural insurance being the operation subject and primary guarantee of modern agricultural development respectively have been highly emphasized by the government sector. We have sound reasons to believe that with the policy boost of the government, agricultural insurance and agricultural economic cooperative organization will promote each other and develop together.

(From page 57)

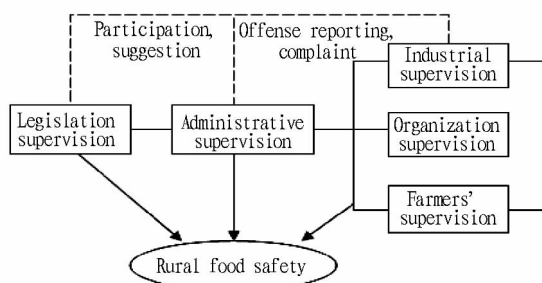


Fig.2 Rural food safety supervision system

channels. In addition, they should also do publicity and public. The governmental departments should have a reasonable reward policy for those individuals who play significant roles for the rural food safety and encourage the public to participate

## References

- [1] The dynamic monitoring stations in the rural economy, development and reform commission of Qiqihar, Heilongjiang Province. Vigorously push forward the development of farmer cooperatives scale land [EB/OL]. (2011-03-08). [http://njs.ndrc.gov.cn/njxx/t20100525\\_348596.htm](http://njs.ndrc.gov.cn/njxx/t20100525_348596.htm). (in Chinese).
- [2] Heilongjiang development large farm machinery cooperatives promote land scale operation[EB/OL]. (2011-02-23). <http://www.amic.agri.gov.cn/nxtwebframework/detail.jsp?articleId=4aea47a72e50233e012e5052d3520483>. (in Chinese).
- [3] YANG XY. Change the agricultural insurance dilemma situation – Through “Anhua mode” to see agriculture insurance system innovation [EB/OL]. (2007-06-04). [http://www.Chinajilin.com.cn/epaper/content/2007-06/04/content\\_826150.htm](http://www.Chinajilin.com.cn/epaper/content/2007-06/04/content_826150.htm). (in Chinese).
- [3] XIAO M. Discussion on ways of economic development in rural areas of Anhui Province based on cooperatives[J]. *Asian Agricultural Research*, 2009, 1(6):16-19, 28.
- [4] WU Q. Analysis on the development mechanism of farmers' specialized cooperative economic organizations[J]. *Journal of Anhui Agricultural Sciences*, 2011, 39(14): 8739-8741. (in Chinese).
- [5] LI GM. Differential marketing of agriculture products dominated by rural cooperative economic organizations[J]. *Asian Agricultural Research*, 2009, 1(6):20-23, 33.
- [6] QI XX. The theoretical foundation and its mode transformation of rural public goods supply in the perspective of organizational competition[J]. *Journal of Anhui Agricultural Sciences*, 2011, 39(18): 11271-11272. (in Chinese).
- [7] WANG F, GUO JC. Investigation and thoughts on the farmers' specialized cooperative economic organizations[J]. *Asian Agriculture Research*, 2009, 1(7):4-7, 24.
- [8] HU YL. Comparative analysis on two accounting systems of rural economical originations[J]. *Journal of Anhui Agricultural Sciences*, 2011, 39(20): 12487-12489. (in Chinese).
- [9] ZHANG PJ, ZHANG Y, HU JW, et al. Developing status of specialized farmers cooperatives—based on the investigation data of 162 villages in Sichuan Province, China[J]. *Asian Agriculture Research*, 2009, 1(8):15-19.
- [10] ZENG ZJ. Subjectivity selection on the development of agricultural industry organization in Yibin[J]. *Journal of Anhui Agricultural Sciences*, 2011, 39(6): 3715-3716+3718. (in Chinese).

in supervising. The governmental departments play a leading role, take the legislation as guidance and cooperate with the industrial supervision and social organization supervision (Fig.2) to improve the supervision sense and supervision ability of the rural people in practice.

## References

- [1] DONG XJ. Recognition on constructing Chinese food safety monitoring and management system[J]. *Journal of Anhui Agricultural Sciences*, 2007(6): 10477. (in Chinese).
- [2] YUAN XW. Preliminary discussion on food safety supervision system in current China[J]. *Journal of Anhui Agricultural Sciences*, 2007(5): 8374-8375. (in Chinese).
- [3] CHEN JX, LIU ZY. China's food safety regulatory system[J]. *Chinese Public Administration*, 2010(8): 61-63. (in Chinese).
- [4] WANG JY, WANG YN, WANG ZW. Awareness of food safety of rural residents and food purchase behaviors[J]. *Rural Economy*, 2010(9): 26-29. (in Chinese).