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Leibniz Institute of Agricultural Development
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Current state and future prospects of crop insurance in Uzbekistan

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Current state and future prospects of crop insurance in Uzbekistan

Abstract

This study describes the importance and development of agricultural insurance sector in Uzbekistan. Agricultural insurance sector in Uzbekistan was established with the state initiative and government organizations still play an important role in service provision. However, agricultural insurance functions without state subsidies and about 30 percent of the crops are insured. This is comparatively better result while compared to other countries in the region. However, sectors still has several development constraints which are not discussed in the international literature.

Therefore, the objective of this study is to describe the development path and challenges in agricultural insurance market in Uzbekistan. Discussions in the study show that access to favorable credit and very high risk averseness of agricultural producers created demand for agricultural insurance in the country which is functioning without the state subsidies. However, premium rates currently charged seem to be very high when compared neighboring countries who subsidize agricultural products. Furthermore, lack of coverage during the systemic drought years could be considered another challenge constraining further development of insurance market in Uzbek agriculture. Establishment of index insurance market could be considered as an alternative option to provide coverage during the systemic drought years since price of the index-based products lower than multiple crop insurance products.

Keywords: Central Asia, transition economy, insurance demand, risk sources, drought

1 Introduction and Research Questions

Agriculture plays an important role in Uzbekistan's economy since more than 20 of the GDP comes from the agricultural sector and the sector provides more than 27% of the employment. Agricultural sector has seen several transformation processes since the independence from the Former Soviet Union and today there can be observed substantial improvements in productivity, especially in the wheat production. However, climate variations is becoming one of the largest problems for agricultural producers. Weather uncertainties and fluctuation in irrigation water availability is becoming the main concern of household producers and newly established individual farms (BOBOJONOV AND AW-HASSAN 2014; DJANIBEKOV AND KHAMZINA 2014).

Yet, on the farm level risk management practices are very restricted, which can be due to relatively limited experience in farming, lack of capital as well as due the state procurement mechanisms. According to the current policy, the largest share of land should be allocated to cotton and wheat and farmers need to deliver largest part of their output to the state processing companies. One of the advantages of this system is that it allowed survival of commercial farming due to input distribution mechanisms which disappeared in the neighboring Central Asian countries. However, the main challenge of the procurement mechanism is that it leaves little room for crop diversification, which otherwise could function as a good hedging mechanism (BOBOJONOV ET AL. 2013).

Agricultural insurance plays an important role under such conditions and could provide possibility to hedge with risks associated with weather and water availability fluctuations (SUTTON ET AL. 2013). Uzbekistan has functioning agricultural insurance market and more than 30 percent of crop land is insured. The agricultural insurance sector was subsidized at the early stages of insurance sector establishment and government stopped the subsidization since 2001. Although subsidies were ceased, agricultural insurance did not see any decline in participation. However, penetration of agricultural insurance slowed down during the recent years and several challenges start to emerge which caused low participation rates (GAYBULLAYEV AND YUSUPOV 2010). Popularity of agricultural insurance is declining and there is no study investigated in the past which investigates the factors influencing on insurance demand and possible options for developing the sector further (SUTTON ET AL. 2013). Therefore, this study pioneers to investigate insurance opportunities and challenges of agricultural insurance business in Uzbekistan.

2 Data and Methods

The study employs regional as well as country level data for the period of 2002-2013 at oblast level on variables related to agricultural insurance. In order to provide contingency in demand for standardized crop insurance products the study employed only data collected from statistical agencies and main insurance organizations catering crop insurance. This data includes insured area of wheat, number of farms purchased insurance, premiums and indemnity payments. Based on this data, development trends are described and challenges for development are discussed. Due to the absence of formal requirements for separate accounting of crop insurance, there are no official statistics provided on crop insurance. Therefore our data analysis is limited to portfolio of companies keeping separate records crop insurance activity. The real scope of insured crop area for some years can be significantly higher than data collected by authors. However the scope of unaccounted insurance portfolio is by large limited to several experimental and short-term regional project financing programs in agricultural production requiring special tailor-made insurance products.

3 Main results and Discussion

The importance and development of agricultural insurance in Uzbekistan

The state still plays crucial role in maintaining agricultural production in Uzbekistan. It facilitates allocation of concessional loans to farmers through commercial banks, organizes centralized supply of chemicals, fertilizers, and other resources required for production of agricultural products. However, the list of agricultural products and services which producers can receive by means of concessional loans and resources is very limited. Access for agricultural producers to commercial credits is limited due to the lack of credit history and liquid collateral, as well as relatively higher risk and return profile of agricultural production.

Due to natural hazards financing of agricultural production is considered as a highly risky business, therefore most banks demand crop insurance covers as a security against natural risks. Hence, the major condition for receiving access to credit resources for farmers is existence of

the guaranteed insurance protection. Besides, the last promotes growth of financial stability of farms, and therefore increases investment appeal of agricultural projects.

As a response to economic transformations and growing commercialization of agricultural production, in 1997, in order to create favorable conditions for national agro-producers and ensure effective development of insurance services in rural areas the state created specialized insurance company State joint-stock insurance company “Uzagrosugurta” (based on Decree of the President No. UP-1713, and the Resolutions of the Cabinet of Ministers No. 125). The priority activities of the company determined by the state where:

- providing insurance protection for property and production of agricultural producers,
- learning solvency of agricultural producers borrowers, providing insurance covers against defaults on loans allocated by commercial banks to the agricultural enterprises for development of production and implementation of projects in agriculture
- insurance of advances directed for cultivation of agricultural products under the contracts for the state needs.

According to the Decree, in order to facilitate more or less stable financial system for indemnifying agricultural industry, the Ministry of Finance of the Republic of Uzbekistan is obliged for annual provision of funds from state budget for covering losses of “Uzagrosugurta” SJIC arising from crop insurance portfolio. From 1998 to 2001 the company had received substantial amount of budgetary subsidies. However, due to increased expertise and sophistication of insurance methodology, since 2002 replenishment of insurance reserves of SJIC “Uzagrosugurta” happened without attraction of budgetary assignments and only at the expense of profit of the company. Table 1 shows that up to 52 percent of the indemnities were subsidized by government.

Table 1. Replenishment of crop insurance reserves of the company by the state budget¹

	1997	1998	1999	2000	2001
Volume of insurance indemnities for crop insurance (mln. UZ. sum)	196,1	996,9	1180,4	2458,6	2859,8
Budget assignments for replenishment of crop insurance reserves (mln. UZ. sum)	-	350,0	350,0	313,5	1497,22
Share of budget assignments in indemnities for crop insurance (%)	-	35,1	29,7	12,8	52,4

Source: Agrosugurta, 2014

Due to the high risk profile of crop production in Uzbekistan and economic transformations in agricultural industry, for a decade SJIC “Uzagrosugurta” was a single company engaging in crop insurance. The company has 206 branches across the administrative divisions of Uzbekistan with more than three thousand insurance agents (GAYBULLAYEV AND YUSUPOV 2010). Starting from 2007, commercial banks in response to high and stable growth of insurance sector started

¹ Prepared by authors on the base of SJIC “Uzagrosugurta”’s figures.

² 700,1 mln. UZ sum were assigned in 2001 for the indemnities of previous years and 154,2 mln. sum were assigned for indemnities of the year 2001 but were transferred in 2002.

to create captive insurance companies in order to retain insurance premiums within their financial systems which.

Table 2. Main indicators of Uzbekistan’s insurance market

Market Indicators	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Volume of insurance premiums under the agroinsurance contracts (mln. Sum)	2904,7	3187,4	3419,3	3857,6	5374,8	7274	6754,6	5640	6405,4	8840,8
Volume of insurance liabilities under the agroinsurance contracts (mln. Sum)	296900,4	354778,6	188469,5	226046,8	329330,9	290200	256400	291300	455600	628300
Volume of indemnities under the agroinsurance contracts (mln. Sum)	629,9	1022,3	762,5	1433	1980,2	2740	3217	1898	1846	2948
Loss ratio under agroinsurance contracts, %	21,7	32,1	22,3	37,1	36,8	37,7	47,6	33,7	28,8	33,3

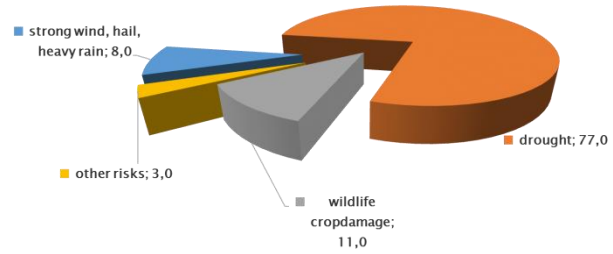
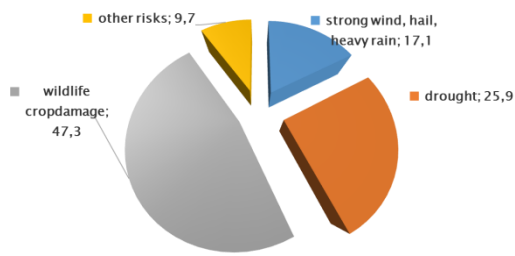
Source: Agrosugurta, 2014. Note: The data for Agroinsurance contracts includes not only crop and cattle insurance, but also property and motor insurance of farmers.

Thus, in 2008, the crop insurance market has been penetrated by “Agroinvest” Joint-stock insurance company, the subsidiary of the 8th largest national bank “Mikrokreditbank” (GAYBULLAYEV AND YUSUPOV 2010). In 2010 the third insurer “Halq sug’urta”, subsidiary of the 5th largest national bank started rendering crop insurance services. Those developments may explain sharp increase in the insurance premiums in 2008.

However, SJIC “Uzagrosugurta” remains the main player in this market. Today, along with Ministry of agriculture and water resources the company participates in the process of defining essential insurance products for farmers and formulating strategy for development of an efficient control system of agricultural risks in the country. It accumulates statistical data and often act as a distributor of information for financial institutions. SJIC “Uzagrosugurta” partially carries out functions of special government agency in supporting agriculture. One of areas of company’s activity is monitoring crop conditions and compliance of agro-producers with agricultural technology for cultivating crops. Financing of agricultural production under the state contracts carried out at the expense of concessional loans allocated by the state Fund for settlements of the agricultural products purchased for the state needs. The procedure of systematic monitoring of the condition of crops allows to stop crediting if risk of failure to produce sufficient harvest will arise. Thus, the state can insure efficiency of funds spent on agricultural production.

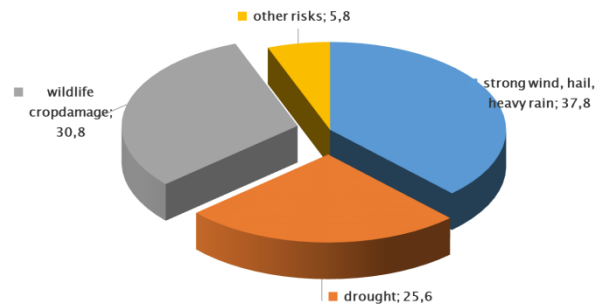
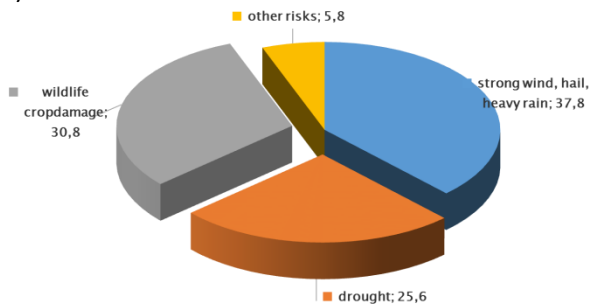
Sources of Insurance risks

Agricultural producers buy multiple peril crop insurance (MPCI) to manage risks associated with wide ranges factors. Importance of risk sources depending on the region and crop. The following graphs explain the main risk sources during the years 2009-2012. As it can be seen from these figures that drought, strong wind and hail are the main risk sources in Uzbekistan.



a)2009

b)2010



c)2011

d)2012

Figure 1: Main risk sources causing insurance payments during the recent years

In order to consider these risk sources, insurance companies in Uzbekistan mainly sell multiple peril crop insurance as well as specific peril insurances such as insurance against hail.

There are very large differences for insurance penetration between the regions. Cotton and wheat are the major crops in Uzbekistan which may cover up to 60-70 percent of the total crop area due to state procurement policy (DJANIBEKOV ET AL. 2012). Therefore, cotton and wheat are the mostly insured crops in terms of area. The following map shows high heterogeneity in terms of coverage of cotton fields with insurance. As it can be seen from the map that only 3 percent of the cotton is northern regions. In contrast central regions have more than 60 percent of their cotton fields insured.



Figure 2: Percentage of insured cotton in different regions in 2012

Similar pattern also could be observed in case of grains which could be seen looking at Figures 2 and 3. Production of wheat is also important in all regions but insurance penetration is very low in some regions.



Figure 3: Percentage of insured grain in different regions in 2012



Figure 4: Premium rate for cotton

Similar to wheat insured area, insurance penetration is very low in northwest regions of Uzbekistan and higher in the central regions. Analysis of the premium rates shown in the Figure 4 and 5 shows that premium rates in those northwest regions are relatively higher when compared to other regions. Those could be considered as one of the factors which effect demand for insurance products.



Figure 5: Premium rates for wheat

However, there are several more factors influencing on insurance demand additional to the premium rates. One of the challenges in this sector is the difficulties of purchasing insurance during the years when the probability of drought occurrence is very high. Insurance companies in Uzbekistan do not sell insurance products if there is a high likelihood that systemic drought happens. This experience is implemented by the company in order to avoid high losses by the companies since losses during the extreme drought years is high in all regions of Uzbekistan. Without subsidy and re-insurance, insurance companies are not able to cope with such high losses. This kind of situation is also observed in Kazakhstan and Russia where insurance companies do not provide indemnity payments during the extreme drought years. However, the main difference between the Uzbek and Russian insurance is that insurance companies in Uzbekistan do not sell insurance if they expect higher probability of drought. Thus insurance companies mainly insure small uncorrelated (between the regions) risks. In contrast Kazakh and Russian insurance companies sell insurance but reject the claims during the systemic risk event years.

4 Conclusions

The analysis and discussions in this study show positive trends in development of agricultural insurance market in Uzbekistan. Insurance market is developing without the state subsidies which functions as unique risk management mechanism in the CIS countries. However, there are several challenges which could be constraining the development of the insurance market further. Lack of insurance coverage during the systemic drought years is one of the main challenges for farmers. Insurance companies in Uzbekistan should consider options of providing insurance products also to cover systemic drought years. Introduction of index-based insurance products and re-insuring their risks could be considered as possible options to be investigated in the future research.

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