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Structural change in turkish agricultural insurance policy and recent developments

Climate changes or global warming and related environmental effects have increased the importance of risk sharing for sustainability of agricultural production. Especially in the developing countries, the farmers have taken less action as compared to their colleagues in the developed countries. Accordingly, the policy makers in developing countries have encouraged the farmers to attempt agricultural insurance against risks. There have been different levels of subsidies on agricultural insurances implemented in several EU Member States. The aim of this paper is to analyze the effect of government-private partnership agricultural insurance system which has been practiced in Turkey since June 2006.

1. Introduction

Monitoring of insurance regimes in emerging economies shows confusing results. Some schemes suffer of low penetration and consistent underwriting losses due to factors ranging from high administration costs to adverse selection (Corneliu 2007). In Turkey, agricultural sector has an especially significant share in the economy which is characteristic for developing countries. Accordingly, recent processes in global economy such as rising food prices, climatic change and other natural risk factors have increased the crucial role of agricultural production and the policy makers have paid relatively more attention to the problem of sustainability of agriculture in governmental policies. According to the data of 2008, the share of agricultural sector in GDP is 11 percent with the employment of 28 percent of the total labor force in Turkey. The share of agricultural sector in the whole economy is in a decreasing trend, but it still plays an important role in the economy of Turkey.

Though a significant part of the population is engaged in agricultural activities, the national income has been distributed unfavorably for rural areas due to their low share in GDP. Because of continual divisions of agricultural territories via inheritance, the decrease areas of agricultural enterprises, and the occurrence of further problems in agricultural regions (infrastructure, education, health, organizational structure etc.), poverty has become a current issue. Therefore, one of the main reasons of poverty are

in stable incomes which have been fluctuating year by year by natural risk factors (such as drought, hail, flood, storms, tornadoes, earthquakes, fire, uncontrollable pests, diseases, and accidents for crops, greenhouses, agricultural buildings, agricultural machinery and livestock).

Taking all this progress into consideration, the reason was seen in the weakness of *Risk Management Systems in Agriculture*. To solve this problem in agriculture, several kinds of attempts were made to establish a risk management system, which would be the main instrument of agricultural insurance system in Turkey. After these unsuccessful attempts in the past, a significant attention has been recently paid to this issue by the government. Then a new agricultural insurance system law, long-expected agricultural insurance law allowing public-private partnership, offering technical and economic resources to protect the agricultural sector from the consequences of difficult conditions, was adopted on June 14 2005. Objective and scope of the new law (Law no:5363) were as follows:

Objective: Article 1 – *The aim of this Law is to determine the procedures and principles regarding the implementation of agricultural insurance in order to compensate farmers for losses occurring due to the risks set out in the Law.*

Scope: Article 2 – *This Law comprise the principals and procedures related to the establishment of the Pool, risks to be covered by the Pool, income and expenditures of the Pool, subsidies for premiums and support for damages exceeding the premium, insurance contract, provision of reinsurance and the duties, competence and responsibilities, contribution and participation of the insurance companies.*

In this study, it is aimed to discuss agricultural insurance system and its determination procedures and principles regarding the implementation of the new agricultural insurance system in Turkey.

2. Risk management systems in turkish agriculture

Agricultural insurance, which was originally started simply as hail insurance, has increasingly been expanded to include many other risks such as frost, flood and drought and, which is also a common practice for governments worldwide, premiums paid by farmers for this coverage were supposed to be subsidized. In Turkey, the development of agricultural insurance was thwarted primarily by such factors as rapid declines in farmers' income levels, the failure of successive governments to develop coherent agricultural policies over the years, and considerable ignorance and disinterest in this issue from the side of both agriculture and insurance sector. (TSRBS 2004).

Risk Management System can be divided into two periods in Turkey: the first period was up to 2006 which dated back to the beginning of the implementation of agricultural insurance in 1957, the second period is after 2006 which has been continued so far. In the first period, to ensure sustainability of agricultural production in Turkey, different risk management systems were used via several kinds of laws instead of a coherent new agricultural insurance system. In the past, the laws used to compensate farmer's income loss from natural risks by giving seed and aid to the farmers who suf-

ferred a loss caused by natural risks. It was called loss ration (at least 40 percent) in these laws and referred to the products affected by natural risks. As to the insurance system in Turkey, total harvesting land is 24.4 million ha, of which 98 percent is exposed to hail risk and 47 percent to other natural risks. In this case, a high potential of agricultural insurance can be seen, as the share of agricultural insurance is 1.8 percent in the insurance sector in Turkey. In this period, agricultural insurance was offered by 9 private companies (9 of 62 companies), beside government's aid offered to farmers. Proportion of the insured in agriculture was so low, 0.1 percent at hail and 0.5 percent at animals (TEAE, 2003). Because of unproductiveness of the systems used, budget reasons and the need of being an expert on risk management, a new system was necessary to be set up in Turkey.

Recently, the new agricultural insurance system, named the second period, started to be used from 6 June 2006, with one authority to guarantee the cover of agricultural production against natural risks. The main characteristics of new system can be summarized as follows:

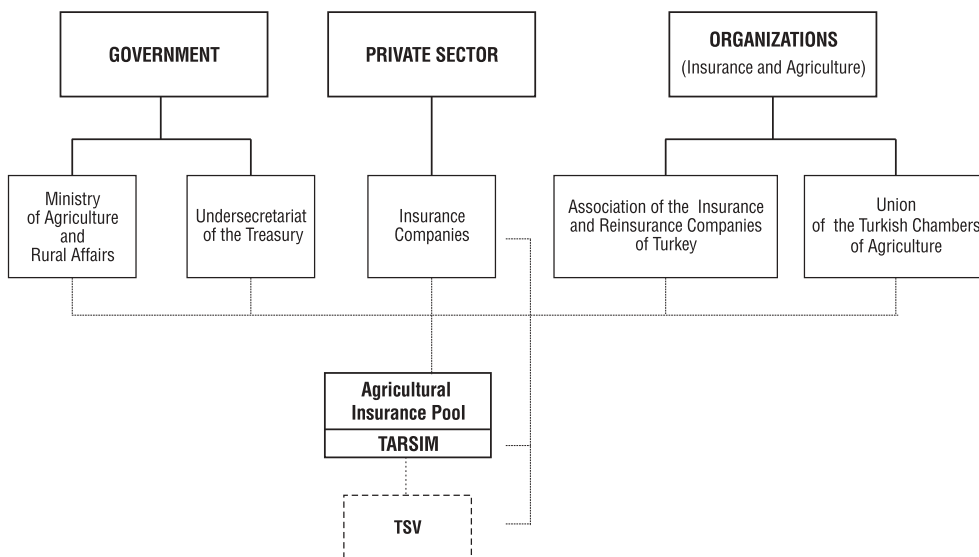
- Agricultural insurance pool
- Cooperation between government and private sector.
- Government subsidizing premium payment (50 percent of total premium in 2008)
- Voluntary for farmers
- A managing company (TARSIM)
- Farmer registration systems

3. Public-private partnerships for risk management in turkish agriculture

Agricultural insurance market in Turkey was underdeveloped because of the lack of farm credit. The fact that small farmers in Turkey did not have enough collateral to obtain low-interest agricultural credit affected their ability to invest in farming and hence their demand for agricultural insurance. The government has taken over the responsibility for preparing a regulatory framework to facilitate the growth of the insurance market (European Commission 2006). The government has supported farmers by financing 50 percent of agricultural insurance premiums since the beginning of the new private-government partnership agricultural insurance system in 2006.

The new agricultural insurance system has been formed by the contributions of government, private agencies, and organizations which have run activities in the field of insurance and agriculture. Main feature of the new agricultural system is the inclusion of an agricultural insurance pool. The management committee of agricultural insurance pool has consisted of 3 participants who have been indicated above. Furthermore, agricultural insurance pool has covered a managing company (TARSIM) which is a management entity, established as a corporation by the insurance companies writing agricultural business in order to carry out all tasks of the Pool within the context of the agricultural insurance law. Insurance companies (22 companies in 2008)

Fig. 1. Institutions Involved in the New Agricultural Insurance System of Turkey



Source: Bora, 2005

participate in TARSIM with equal shares, and management committee that consist of 7 members from 5 different actors, which is Ministry of Agriculture and Rural Affairs (2 members), Undersecretaries of the Treasury (2 members), Association of the Insurance and Reinsurance Companies (1 member), Union of the Turkish Chambers of Agriculture (1 member), Managing Company of the Pool – TARSIM (1 member) (TARSIM, 2008).

The basic duties of management committee and TARSIM cover the creation of the main principles applied within the new system and determination studies related to the issues of crops, ratio of subsidies, risks and regions to be supported. Moreover, fixing problems faced, loss adjustment procedures, making contracts with TARSIM and determination of the commission for insurance companies in return for their premium transfer enter the scope of main responsibility of Management Committee. TARSIM plays an important role in the system to carry out all kind of works related to loss adjustment activities, risk sharing, risk transfer and implementation of reinsurance plan as well as the collection of premiums and payment of indemnities.

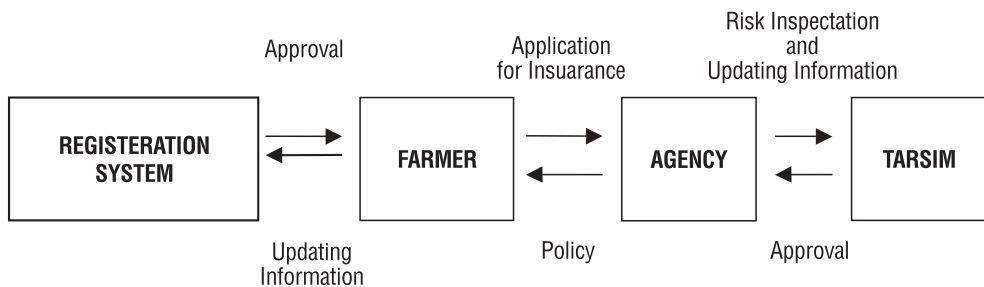
Ministry of Agriculture and Rural Affairs (MARA) is responsible for the development of new agricultural insurance system within the country covering such issues as monitoring and evaluation of the system, organization of seminars, training programs and publications; MARA has also to present proposals for approval to the Council of Ministers regarding premium subsidies on the basis of crops, risks, and regions.

All insurance companies issue policies on the same terms and conditions, using the same premium, exemption rates and technical terms in TARSIM Pool system (TSRSB 2007). Premiums paid by the farmer to insurance companies and aid premiums paid by

the government are collected by the pool operated by TARSIM to which 22 insurance companies have been participated in the first 10 months of 2008. Government's premium subsidies have been kept at the level of 50 perc., in 2008, like in 2006 and 2007. In the Turkish insurance sector, as far as the agriculture branch is concerned , the share of agricultural insurance premium income within total premium income for 2005 was raised, as compared to the previous year, from 0.43 percent to 0.62 percent. In 2005, the loss ratio in Agriculture branch has been reported to be 87.38 percent, showing an increase as compared to the loss ratio of 2004.

An Issuance of government supported policy has been practiced as it is seen in Fig. 2. The first requirement to be met by farmers in order to have government support for agricultural insurance is that they have to be registered in farmers' registration system. The registration of farmers and their activities also plays an important role in modernization and restructuring of Turkish agriculture. In addition, the largeness of agricultural sector in total economic activity and small size of single farms, as compared with EU average, have caused diffuculties with the registration of agricultural sector. Consequently, registration system can be found to be necessary for the process of implementing insurance in the sector of agriculture.

Fig 2. Issuance of A Policy

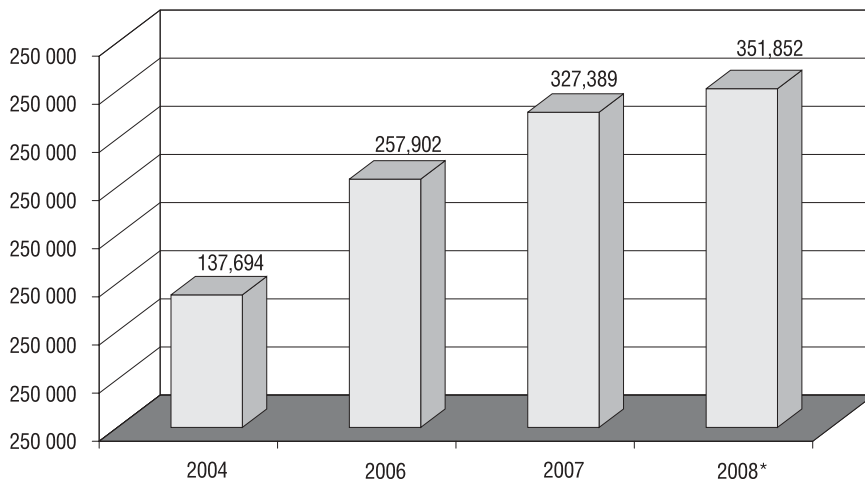


In Turkey, the farmers have been registered depending of their products. These registration systems are operated by:, National Farmer Registration System (NFRS) for crops;, Integrated Administration and Control System (IACS) for greenhouses; Preliminary Pedigree and Pedigree System for livestock,; National Aquaculture Registration System for aquaculture.

4. Recent process in agricultural insurance market

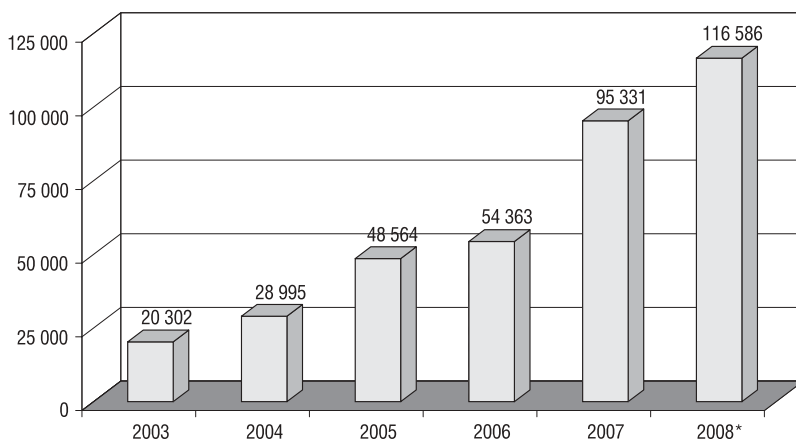
The agricultural insurance's share in total insurance market is still low in Turkey. However, it has been found that the number of policies has increased in recent years, especially after 2005. In the first 10 months of 2008, 351.82 policies have been signed versus 137.694 in the whole year of 2004. This increase can be the evidence of the effective role played by the new agricultural insurance system.

Fig. 3. The Recent Process of Agricultural Insurance Policies in Turkey*



Agricultural insurance premiums have been increased in recent years, especially after the new government supported agricultural insurance began in 2006, as it is seen in Fig. 4. The average written premium has also increased in recent years. The average written premium in the first 10 months of 2008 is 331 YTL while it was 210 YTL in 2004. This average value increase is more than the general price (Consumer Price Index) increase in the same time period. Consequently, the positive effect of government support has been seen in respect of written premiums. The government support for agricultural insurance between June 2006 and August 2008 was 82 Million TRY (157 Million PLN in November 2008 rates) as reported by Association of the Insurance and reinsurance Companies of Turkey.

Fig.4. The Recent Process of Agricultural Insurance Policies in Turkey (Written Premiums in TRY)

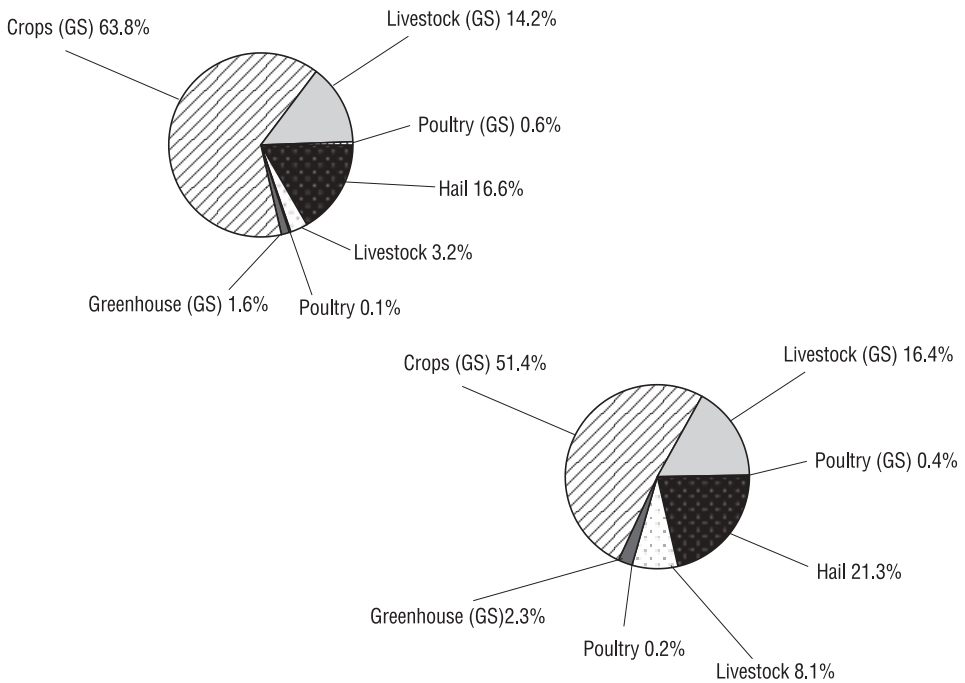


Source : Source: *The Association of the Insurance and Reinsurance Companies of Turkey*

* The data for 2008 include January 1st 2008-October 31st 2008 for all paper.

The new agricultural insurance system which is supported by government started to be implemented on 01.06.2006. Accordingly, it is observed that the manufacturers' interest in insurance has increased since 01.06.2006, and the the interest of agents has increased in this respect as it is an additional source of income, especially for the agents having good business relations in rural areas, and the companies have focused on agricultural insurance agents' training and marketing activities within this framework (TSRBS 2006). The distribution of agricultural insurance products in 2007-2008 can be seen in Fig. 5. The year of 2007 can be assumed to be the first full year because the new system began in the middle of 2006. The government supported (GS) agricultural insurance share in total agricultural insurance in terms of written premiums was 70.5 perc. in 2004. In 2008, the share of government supported agricultural insurances increased to 80.2 perc.80. Consequently, government support has been used extensively within agricultural sector not so long after the commencement of the new agricultural insurance system.

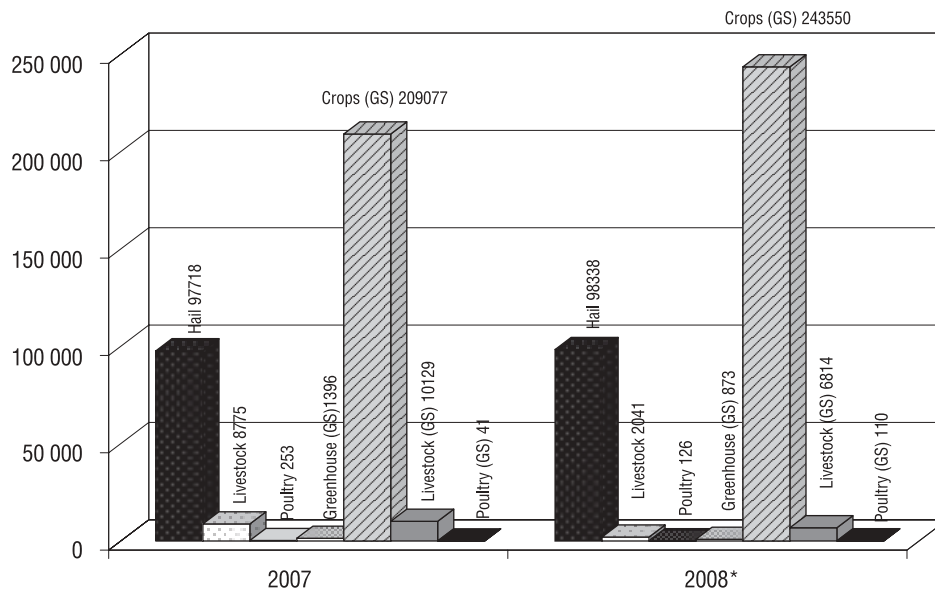
Fig. 5. Distribution of Agricultural Insurances as Written Premiums



Source: *The Association of the Insurance and Reinsurance Companies of Turkey*

Fig 6. shows that government supported agricultural insurance policies have been used mostly (nearly 97 perc.) for crops. However, the average written premiums have been lowest on policies for hail (196 TRY) and crops (305 TRY) in 2008 while these amounts were 173 TRY and 223 TRY in 2007, respectively.

Fig 6. Distribution of Agricultural Insurances as Number of Policies



Source: The Association of the Insurance and Reinsurance Companies of Turkey

In 2005, there were 15 companies operating in agricultural insurance branch and the number of insurance companies has increased to 22 in 2008 whereby these companies have equal shares in “agricultural insurance pool” which was built in 2006 by 16 companies. There have been only a few companies which have had most share of agricultural insurance market. However, structural change began in the market after 2006, when the new government supported agricultural insurance system was constituted. In 2004, only 2 companies had 63.07 per. of the whole agricultural insurance market. However, these 2 companies have had 42.46 per. of the whole agricultural insurance market in the first 10 months of 2008. Consequently, in recent years, more companies have been operating in agricultural insurance market, and the structure of the market has become more competitive.

Table 1. The Structural Process of Agricultural Insurance Market in Turkey

Agency	2004	2005	Agency	2006	2007	Agency	2008*
Baæak	37.4%	38.9%	Güven	32.0%	25.1%	Güven	22.3%
Güven	25.7%	37.0%	Basak			Basak	
			Groupama	31.0%	24.4%	Groupam	20.2%
Isviçre	7.9%	5.8%	Gunes	4.0%	14.1%	Gunes	19.1%
Koç Allianz	5.2%	5.3%	Koc Allianz	4.0%	6.8%	Anadolu	7.2%
Güneæ	4.6%	4.0%	Aksigorta	4.6%	5.5%	Ak Sigorta	7.0%
First 5 agencies	80.8%	91.0%	First 5 agencies	75.6%	75.9%	First 5 agencies	75.8%

Source: The Association of the Insurance and Reinsurance Companies of Turkey

Last year agricultural insurance has been increased in terms of both volume and number of policies, which was related to sectoral largeness and governmental supports given to the sector. Another factor leading to growth was the commencement of policy issuance by TARSIM. It can also be expected that insurance companies will make more efforts to get more share in agricultural insurance market. Accordingly, efforts of insurance companies will enable to convince more farmers to share their risks and to improve the sustainability of agricultural business by joining the insurance system.

Conclusion

The new agricultural insurance system has had an important position in agriculture sector of Turkey, recently. However, despite of this growth in agricultural insurance sector, the system needs more time to be developed and to cover other risks, such as drought related to global warming. As the system is still unknown to the farmers, they need more education and training programs. However, taking the economic and social potential in this field into account, it is expected by companies and Ministry of Agriculture and Rural Affairs (MARA) that 40% of farmers will be covered within this system by 2012.

The structure of agriculture in Turkey is an important barrier for the development of agricultural insurance. Thus, registration of agricultural sector is regarded as a necessity for the government to solve the problems and to develop the sector. For this reason, registration of agricultural activities is the main point of the new agricultural insurance system in Turkey. In addition, the farmers have to update their information to the registration system each year, in order to be able to get government support for their agricultural insurance.

According to the first data concerning government supported agricultural insurance system show a growing trend in terms of both volume and the number of policies. Most of the policies have been concluded in respect of crops. The average premium on livestock is high when compared to crops, because this insurance is popular among large farmers.

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Zmiany strukturalne i aktualny rozwój polityki ubezpieczeń rolnych w Turcji – streszczenie

Zmiany klimatu oraz globalne ocieplenie, a także związane z tymi zjawiskami wpływ na środowisko naturalne, zwiększyły znaczenie podziału ryzyka dla ekonomicznego zabezpieczenia produkcji rolnej. W krajach rozwijających się rolnicy podejmowali działania w tym zakresie w znacznie mniejszej skali niż ich koledzy w krajach rozwiniętych. W związku z tym politycy w krajach rozwijających się zachęcali rolników do zawierania ubezpieczeń od ryzyk związanych z produkcją rolną. W kilku krajach członkowskich UE wprowadzono subsydiowanie, na różnym poziomie, ubezpieczeń rolniczych. Celem niniejszego artykułu jest analiza efektów wprowadzenia systemu ubezpieczeń rolniczych w oparciu o partnerstwo rządowo-prywatne, który działa w Turcji od czerwca roku 2006.