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# DEVELOPMENT OF PROPERTY INSURANCES FOR AGRLICULTURE IN POLAND

# ROZWÓJ MAJATKOWYCH UBEZPIECZEŃ ROLNICZYCH W POLSCE

Key words: property insurances, agriculture, Poland

Słowa kluczowe: ubezpieczenia majątkowe, rolnictwo, Polska

**Abstract.** The aim of the paper is to present the analysis of development of compulsory farmer's third-party liability insurance of farmers and farm building insurance. The study covers also voluntary insurance of crop and livestock. The study is prepared on the basis of the Polish Financial Supervision Authority (PFSA) (Polish: Komisja Nadzoru Finansowego) for the years 2006-2011.

### Introduction

Various random events occurring in agriculture result in impoverishment, destroy of property and lead to losses in the generated output. Moreover, they threaten the health and lives, and sometimes affect further life of victims [Majewski, Sulewski 2011]. Regularly recurring natural disasters and other acts of nature, therefore, make farmers consider voluntary insurers offers. Insurance products are becoming an indispensable element for the proper functioning of the farm. They are prerequisities for stabilization of farm and rural economy as a whole [Stempel 2010].

The aim of this paper is to present the analysis of selected property insurance in agriculture. The scope of work relates to compulsory third-party liability insurance of farmers, farm ownership and insurance of farm buildings from fire and other accidents. The study covers also voluntary insurance of crop and livestock. The paper has been prepared on the basis of the Polish Financial Supervision Authority (PFSA) (Polish: Komisja Nadzoru Finansowego) for the years 2006-2011.

# Characteristics of selected property insurances for agricultural

Property insurance is part of business insurance. The object of insurance may be the property and liability of the policyholder. Taking into account the criterion of the degree of freedom in the establishment of an insurance relationship, among property insurance the following can be distinguished:

- compulsory insurance, which is result of the legislative obligation to conclude an insurance contract,
- voluntary insurance, of which the conclusion depends on the will of the policyholder.

From the point of view of the agricultural economy the most important are the compulsory third-party liability insurance of farmers (TPL of farmers) and the compulsory insurance of farm buildings from fire and other accidents (the insurance of farm buildings). Their main aim is to protect agricultural production and the vital interests of the farmers.

The farmer is obliged to conclude a TPL insurance contract as a result of farm ownership. The contract of insurance includes insurance of farmers for a period of 12 months. The obligation to conclude an insurance contract liability arises on the day the farmer take possession of the farm. The liability insurance of farmers entitles to compensation if a farmer, a person remaining with him in the same household or a person working on the farm is obliged to compensation for damage, in connection with the possession of the farm injury, which results in death, injury, problem with health or the loss, destruction or damage to property. Farmers' TPL insurance covers liability for the damage, connected with the possession of the farm, made by the farmer and every person who works on the farm during the period of insurance. Fulfillment of an obligation of compulsory insurance shall be subject to inspection. The fee for failure to conclude an agreement amounts to one tenth of the minimum wage (Ustawa z 22 maja 2003 r.).

The number of insurance contracts varied in the years 2006-2011. In 2011, more than 1.5 million insurance policy for compulsory civil liability insurance of farmers was concluded (an increase of about 5% compared to 2006). The lowest number of policies were concluded in 2007 (just over 1.4 million).

Table 1. Selected data on compulsory third-party hability insurance of farmers
Table 1. Selected data on compulsory third-party liability insurance of farmers

Specification/Wyszczególnienie	Years/Lata					
	2006	2007	2008	2009	2010	2011
Number of policies/Liczba polis	1 444 891	1 409 656	1 454 425	1 441 381	1 421 146	1 510 808
Gross premium written [thous. PLN]/ Składka przypisane brutto [tys. zł]	38 374	42 383	47 072	49 325	50 803	54 056
Number of payments/Liczba wypłat	4148	3883	4296	4461	4489	4875
Gross claims paid [thous. PLN]/ Odszkodowania wypłacone brutto[tys. zł]	16 047	26 481	28 347	24 416	25 152	27 537
Loss ratio/Wskaźnik szkodowości [%]	41.82	62.48	60.22	49.50	49.51	50.94

Source: own study based on Rynek ubezpieczeń 2006-2010, Rynek ubezpieczeń 2011

Źródło: Opracowanie własne na podstawie Rynek ubezpieczeń 2006-2010, Rynek ubezpieczeń 2011

On the contrary, in case of gross premiums written notice a systematic growth is observed. In 2011 this factor was equal 54 056 thousand PLN and was higher by 41% (ie. 50 222 thousand PLN) compared to 2006. A similar trend can be observed in the case of gross claims paid. This value in 2011 compared to 2006 increased by more than 70%. Loss ratio (calculated as the ratio of gross claims paid to gross premiums written expressed in percent<sup>1</sup>), in turn, received the highest value – 60% – in 2007 and 2008 (Tab. 1).

The farmer is obliged to conclude a contract of farm building insurance<sup>2</sup> from fire and other accidents. The obligation to take insurance of agricultural building begins on the day the building is covered with a roof. The insurance contract is concluded for a period of 12 months. The farm buildings insurance entitles for compensation for damage in buildings due to random events such as: fire, hurricane, flood, flooding, torrential rain, hail, snow, lightning, explosions, landslides, subsidence, avalanches or falling of aircraft. The fulfillment of an obligation of compulsory insurance shall be subject to inspection. The fee for failure to conclude an agreement amounts to a quarter of the minimum wage (Ustawa z 22 maja 2003 r.).

The number of farm building insurance contracts of in 2011 has increased by about 17% compared to 2006, coming in at 1 690.0 thousand pieces. In the case of gross premiums written notice the systematic growth can be observed. In 2011, this value amounted to 421.6 thousand PLN and was higher by 40% compared to 2006. Loss ratio shoved the highest value in 2010 (131.57%), which was also associated with the highest number and value of claims paid during the period (Tab. 2). This case was related to the mass occurrence of damage (floods, storms and torrential rain), especially during May, June, August and September 2010.

Insurance companies also provide a wide range of insurance products that the farmer can buy on the basis of voluntary agreements, such as for crops and livestock. Crop insurance may cover by annual crops, perennial and durable plant, spring and winter. Moreover, the coverage may include yields of hops, tobacco, herbs in drying technology process; grass meadows and pastures, trees and shrubs, fruit and berry plantations. Crops can be insured against the risk of fire, hurricane, flood, torrential rain, hail, lightning, explosion, landslides, avalanches, drought, adverse effects of wintering or spring frost. In the case of animal insurance farmer has a choice of two ranges of protection: basic and extended.

Table 2. Selected data on compulsory insurance of farm buildings

Tabela 2. Wybrane dane dotyczące obowiązkowego ubezpieczenia budynków w gospodarstwach rolnych

Specification/Wyszczególnienie	Years/Lata					
	2006	2007	2008	2009	2010	2011
Number of policies/Liczba polis	1 443 071	1 588 328	1 640 681	1 624 163	1 611 797	1 690 097
Gross written premiums [thous. PLN]/ Składki przypisane brutto [tys. zł]	301 203	319 765	352 132	376 170	388 789	421 597
Number of payments/Liczba wypłat	22 716	83 732	34 914	24 359	89 881	33 255
Gross claims paid [thous. PLN]/ Odszkodowania wypłacone brutto [tys. zł]	111 841	178 654	131 963	119 356	511 528	200 854
Loss ratio/Wskaźnik szkodowości [%]	37.13	55.87	37.48	31.73	131.57	47.64

Source: see tab. 1 Źródło: jak w tab. 1

The applied formula does not take into account changes in provisions for outstanding claims of the gross changes in unearned premiums and reserves for unexpired risks, which significantly increase values of loss ratio [Łozowski 2008].

The building forming part of a farm – a work of area exceeding 20 m2, permanently connected with land, separated from the space by partitions and having foundation and roof (Ustawa z 22 maja 2003 r.).

Table 3. Selected data on voluntary insurance of crop

Tabela 3. Wybrane dane dotyczące dobrowolnego ubezpieczenia upraw roślinnych

Specification/Wyszczególnienie	Years/Lata					
	2006	2007	2008	2009	2010	2011
Number of policies/Liczba polis	49 367	90 474	85 134	41 826	47 018	52 781
Gross written premiums [thous. PLN]/ Składki przypisane brutto [tys. zł]	56 488	108 757	109 120	78 563	98 073	155 577
Number of payments/Liczba wypłat	3428	11 301	15 554	5480	7683	17 986
Gross claims paid [thous. PLN]/ Odszkodowania wypłacone brutto [tys. zl]	15 861	102 085	138 552	58 095	49 990	187 639
Loss ratio/Wskaźnik szkodowości [%]	28.08	93.87	126.97	73.95	50.97	120.61

Source: see tab. 1 Źródło: jak w tab. 1

In terms of basic insurance against damage caused by the deaths by disease, accident or natural perils (fire, flood, hurricane, lightning, avalanches, landslides). Extended protection covers damage caused by the emergency slaughter [Stempel 2010].

In the years 2006-2011 the number of voluntary agreements on crop insurance and the value of gross written premiums varied. Most policies were sold in 2007 and 2008 (respectively 90.5 and 85.1 thousand units). Total payments and the gross value of claims paid was the highest in 2007, 2008 and 2011. For those years, the highest value of claims was recorded (Tab. 3). In these years crops were particularly vulnerable to natural disasters. Undoubtedly, a large impact on the number of voluntary insurance policies has the insurance system for crops and livestock, with funding from the state budget, which is implemented in Poland since 2006. The number of concluded insurance policies with funding from the state budget, was nearly three times higher than in the case of voluntary insurance in 2009 and 2010 [Parlińska 2011].

The number of concluded voluntary policies on the insurance of livestock steadily decreased. In 2011 only 13.4 thousand policies were sold, whereas in 2006 this number was 35.2 thousand (a decrease of approximately 60%). The share of claims paid exceed the gross written premium in the years 2008-2009 and 2011 (Tab. 4).

Table 4. Selected data on voluntary insurance of livestock Tabela 4. Wybrane dane dotyczące ubezpieczenia zwierząt hodowlanych

Specification/Wyszczególnienie	Years/Lata					
	2006	2007	2008	2009	2010	2011
Number of policies/Liczba polis	35 191	32 085	27 128	22 998	18 393	13 356
Gross written premiums [thous. PLN]/ Składki przypisane brutto [tys. zł]	13 151	14 947	15 613	15 650	15 134	9 630
Number of payments/Liczba wypłat	4 152	4 947	5 926	6 370	6 311	5 418
Gross claims paid [thous. PLN]/ Odszkodowania wypłacone brutto [tys. zl]	9 049	12 731	16 049	19 315	15 123	14 553
Loss ratio/Wskaźnik szkodowości [%]	68.81	85.18	102.80	123.42	99.93	151.12

Source: see tab. 1 Źródło: jak w tab. 1

## Conclusion

Property insurance is an important instrument to protect farms. In Poland, farmers have an obligation to conclude third-party liability insurance and farm buildings insurance fire and other accidents. The increase in insurance contracts concluded under this head in 2011 compared to 2006, while simultaneously decreasing the number of farms, may indicate an increase in insurance awareness of farmers, and thus increase the prevalence of the operation of compulsory insurance. Loss ratio for TPL insurance for farmers and farm buildings do not exceed 60% for the period 2006-2011. The exception was 2010, when the level of gross claims paid under the insurance of farm buildings exceeded the gross premiums collected. Large impact on the number of voluntary crop insurance has the insurance system for crops and livestock, implemented in Poland, with is subsidised from the state budget.

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#### Streszczenie

Przedstawiono dane dotyczące rozwoju obowiązkowego ubezpieczenia odpowiedzialności cywilnej rolników oraz ubezpieczenia budynków wchodzących w skład gospodarstwa rolnego. Oceniono również dobrowolne ubezpieczenia upraw roślinnych i zwierząt gospodarskich. Praca ma charakter opisowo-porównawczy. Została przygotowana na podstawie danych Komisji Nadzoru Finansowego dla lat 2006-2011.

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