Review article

Economics of Agriculture 4/2017 UDC: 368.5:338.431(497.6)

# INSURANCE CONTRACT AS THE BASIS FOR THE SAFETY OF AGRICULTURAL PRODUCERS IN THE REPUBLIC OF SRPSKA

Boro Krstić<sup>1</sup>, Zorica Vasiljević<sup>2</sup>, Miroslav Nedeljković<sup>3</sup>

#### Summary

The aim of the paper is to point out the impact of the insurance contract on the safety of agricultural producers in the Republic of Srpska, based on the assumption that the insurance of crops, fruits and animals is a factor that implies elimination of harmful consequences in case of damage. This attitude of the authors is based on the fact that with the conclusion of an insurance contract in agriculture, the part of the responsibility is transferred to the state (by participation in the co-financing of the insurance premium), then to the insurance company (by claiming the damage from the insurance) and finally to the agricultural producers. Bearing in mind that insurance is very present in all segments of the modern society, which implies a great variety of forms of insurance, the authors of this paper start by presenting a general structure and classification of insurance, which also includes the insurance for agricultural purposes. In order to get a realistic picture of the current state of insurance in agriculture in the Republic of Srpska, an analysis of the legal regulation that regulates the mentioned issues was carried out. The authors also conducted a survey among agricultural producers to analyze the reasons why they have a negative interest for this segment of insurance and thus a small number of closed insurance policies with insurance companies. Based on these findings, this paper gives recommendations for the improvement of the situation and proposals for better solutions which would raise the safety of agricultural producers to a higher level.

*Key words*: agriculture insurance, insurance contract, agricultural producers, insurance card

JEL: Q18, K22

<sup>1</sup> Boro Krstić Ph.D., Assistant Professor, University of Bijeljina, Faculty of Agriculture, Republic of Srpska, B&H, Phone: +387 65 237 072, E-mail: <u>direktor@ubn.rs.ba</u>

<sup>2</sup> Zorica Vasiljević Ph.D., Full Professor, University of Belgrade, Faculty of Agriculture, Republic of Serbia, Phone: +381 64 14 39 942, E-mail: <u>vazor@agrif.bg.ac.rs</u>

<sup>3</sup> Miroslav Nedeljković, MSc., Ph.D. Candidate, University of Novi Sad, Faculty of Agriculture, Republic of Serbia, Phone: +387 66 893 935, E-mail, <u>poljoprivreda.ubn@gmail.com</u>

#### Introduction

The term insurance was first used in the ancient times, in terms of organizing communities that would compensate the damage to their members in certain situations, especially in the case of traveling caravans. These forms of insurance first appeared in the Italian trade cities, and then moved to other countries, while new forms of insurance appeared with the establishment of Lloyd 1779 (Vasiljević, 2001).

Unlike Western European countries, the idea and practice of insurance was introduced the new state of Serbia quite late. Insurance activity in Serbia was first performed by foreign companies, and the first domestic insurance institution was founded in 1897 (Kočović et al., 2010). The founders were Luka Ćelović and Đorđe Vajfert, and it was first functioning as the Insurance Department of the Belgrade Cooperative. Until the beginning of the First World War in the Kingdom of Serbia, three other insurance companies with domestic capital were established - "Serbia", "Šumadija" and "Jugoslavija". Insurance basically means security, and it is closely connected with terms, danger, risk, damage.

Insurance policy has its roots in games of chance and mathematics of probability, from which it has evolved over time (Rohrbach, 2013). It can be said that insurance implies a collection of multiple disciplines that, with the help of different methods, try to reach certain cognitions. First of all, it refers to the following disciplines: insurance law, insurance economics, actuarial mathematics, medical insurance, engineering insurance, insurance policy, insurance crime, etc. (Rohrbach, 2008)

## Methodology

In the research carried out for the purpose of writing this paper, several different approaches and methodical procedures were used.

*Positive-law method.* Positive regulations of the Republic of Srpska that regulate insurance as a liability-legal relationship, as well as insurance in agricultural production were used to a great extent in the paper. The goal of the positive-law method is to establish the quality of the solution of the positive legal regulations in the Republic of Srpska in the mentioned area, as well as to point to the likely consequences that could result in the application of these solutions in practice.

*Multidisciplinary approach*. The contract on insurance of crops and fruits in the Republic of Srpska is primarily analyzed from the legal aspect. However, in some parts of the paper a multidisciplinary approach was also used. Especially for the analysis of numerous legal solutions in this matter, significant economic knowledge and research are very significant, as well as knowledge from the agricultural scientific field, and statistical analyzes that represent the real basis for accepting some legal concept.

*Survey method*. The survey research was carried out in 2016, among agricultural producers from the territory of the city of Bijeljina (Semberija), the second largest city in the Republic of Srpska, and the first in terms of the intensity of agricultural production.

A total of 120 individual agricultural producers were surveyed. Respondents needed 10 minutes to complete the survey. Those questionnaires that were partially filled and in which the answer to the question of social desirability suggested the random reply were not included in the further analysis and data processing. The final size of the processed sample consisted of 88 questionnaires.

*Statistical methods*. In processing the data, the methods of descriptive statistics were used (frequencies and percentages), then the analysis of time series, and the *Chi-squared test*. The *SPSS 20.0* software package was used for data analysis.

## Concept and types of insurance

The insurance contract obliges the insurance contractor to pay a certain fee to the insurance organization (insurer), and the organization is obliged, in the case of the happening that represents the insured event, to pay to the insured or to a third party a fee or contract amount or do something else (ZOO, Article 897). The parties from the insurance contract are:

- the contracting parties - the insurance contractor and the insurer, taking into consideration that the insurance contractor can be the insured, if the contract is concluded on his own behalf and for his own account;

- The insured is a person to whom the rights under the contract belong, provided that the insurance contractor has concluded a contract in his own name and for another person's account;

- An insured person is a subject in relation to whose life or action the contract is concluded;

- The injured third party - a person who in the case of the realized insured event can submit certain claims to the insurer;

- Insurance beneficiary - It is used in the event of death insurance.

The insured case is an event on the basis of which the insurance is concluded, and it must be future, uncertain and independent of the exclusive will of the contracting authority (ZOO, Article 898). The aforementioned legal provision integrated the notion of insured case and risk, while some authors distinguish between the notions of a secured case and risk. The secured case is an event foreseen by a contract whose performance means the realization of the risk and the appearance of the main obligation of the insurer to pay insurance compensation, insured sum or do something else (Vasiljević 2014). Uncertainty actually determines the essence of the insured case. In securing property and liability, uncertainty usually refers to something that has not happened or will happen in the future, and thus the insured event has certain negative consequences for the financial situation of the insured or, in other words, leads to some financial loss for which the insurance coverage is required (MacGillivray on Insurance Law, 2003).

No	Criteria for the division of insurance	Type of insurance	
1	According to the place of risk realization	<ul> <li>Land insurance</li> <li>Insurance in air navigation</li> <li>Navigation insurance</li> </ul>	Transport insurance
2	According to the object of insurance that is at risk	<ul><li>Property insurance</li><li>Personal insurance</li></ul>	
3	According to the method of formation	- Obligatory - Voluntarily	
4	According to the method of carrying out the risk	- Insurance - Reinsurance - Coinsurance	
5	According to the method of organizing insurance	- premium - Mutual	
6	According to the number of insurance subjects	- Individual - Collective	

Table 1. Types of insurance

Source: Vasiljević, 2014;

This division in Table 1 is generally accepted in the legal theory; however, when discussing the insurance in the territory of the Republic of Srpska, the division was carried out according to a completely different classification, i.e. the sub-qualification of the insurance, so the insurance of crops and fruits belongs to the group 9. Insurance against other damages to the property and within the qualification of non-life insurance (Decision on Types of Insurance, 2006 and Instructions for Applying the Decision on Types of Insurance, 2017).

## Insurance of crops and fruits

Insurance of crops and fruits belongs to the group of property insurance (Marović & Avdalović, 2003) . However, in order to make a clearer view of the place, that is, the position of insurance of crops and fruits in relation to other types of property insurance, Table 2 shows the structure of the property insurance company. The division is performed according to the object of insurance that is at risk.

Table 2. Classification of property insurance

Property insurance				
Securing things	Liability	Claims	Transportation insurance	
	insurance	insurance		
From fire	from damage to		Casco	Cargo
FIOIDINE	liability			
	for damage from		insurance of vehicles	goods in transport
From flood	the use of motor		ships, aircrafts and	and other
	vehicles		boats	insurances
From theft	insurance of the			fares
From theit	carrier of liability			lates
Crops and fruits				Insurance costs
Construction				

Source: Vasiljević, 2014.

As seen from the presented table, the insurance of crops and fruits belongs to the group of property insurance. Regardless of whatever being in the property insurance group, insurance of crops and fruits has its own conditions, which are, as a rule, determined by insurance companies and that meet their internal standards.

Insurance of crops and fruits is twofold. On the one hand, each country, by measures of economic policy, can affect the safety of agricultural producers, and these are structural policy measures, whereas, on the other hand, every agricultural producer, whether it is an individual agricultural producers or a company that performs the activity of agricultural production, can conclude an insurance contract with certain insurance organizations, and thus secure their crops and fruits from the risks covered by that contract (Dana, 2010).

# Legal regulations on insurance in agriculture in the Republic of Srpska and surrounding countries

Agricultural production in the Republic of Srpska has a significant place in the formation of Gross Domestic Product (GDP). In the structure of the Republika Srpska's GDP in 2012, agriculture participated with 8%, which is considered a rather high share. In 2016, after the trade sector (11.1%) and the processing industry (10.8%), agriculture (with hunting and forestry) in the structure of GDP is in the third place with a share of 9.3%. This points to the fact that agriculture and its development are important for the Republic of Srpska, not only from the ecological and social, but also from the economic point of view (Strategic Plan for the Development of Agriculture and Rural Areas of Republika Srpska, 2016).

Bearing in mind the limitations of agricultural land in the Republic of Srpska, in order to achieve the function of sustainable agriculture and sustainable development, besides the rational use of land, it is necessary to introduce additional measures in terms of reducing the risk of damage and destruction of agricultural crops.

Agricultural insurance in the Republic of Srpska is regulated by legal and sub-legal acts, as it is in the Strategic Plan for the Development of Agriculture and Rural Areas of the Republic of Srpska for the period 2016-2020.

A direct incentive for agricultural producers is provided by the Government of the Republic of Srpska by allocating funds for co-financing the insurance premium for primary agricultural production, and the funds are received by beneficiaries who make primary agricultural production for the current year. The amount of incentive funds is paid up to 50% of the amount of insurance costs, and can not be higher than 25,000 BAM (Bosnian Marks) per user. These funds can be used for livestock production (facilities and cattle), fruit and wine production, vegetable and crop production. Any agricultural producer wishing to realize this kind of incentive is obliged to submit to the Agency for Agrarian Payments of the Republic of Srpska the insurance policy for the current year and proof of the insurance payment, and the request can be submitted no later than September 30<sup>th</sup> of the current year (An act on conditions and ways of

achieving financial incentives for the development of agriculture and villages, 2017, Article 59).

Unlike the Republic of Srpska, incentives for securing insurance premiums in agriculture in neighboring countries are regulated in a more precise way. Namely, this type of incentive in the Republic of Serbia is regulated by a special policy that specifies different amounts of funds depending on the type of cultivation that is provided. Thus, incentives for insurance of agricultural crops are 100,000 RSD; incentives for insurance of vegetable crops - 500,000 RSD; the insurance of fruit crops, vineyards and hops - 1.000.000 RSD; incentives for insurance of nurseries and / or young perennial plants - 500,000 RSD; incentives for animal insurance - 2.000.000,00 RSD. As a total for all types of incentives of this policy, the incentive user can obtain a maximum of 2.500.000 RSD. (A regulation on conditions, manner and form of request for exercising the right to incentives for the insurance premium for crops, fruits, perennial plantations, nurseries and animals, 2017, Article 7).

The Republic of Croatia secures reimbursement based on insurance in the amount of 65% of the total premium paid, and a maximum of EUR 70,000 (Regulation on the implementation of the measure M17 "Risk management", sub-section 17.1 "Insurance of crops, animals and plants" from the Rural Development Program of the Republic of Croatia for the period 2014-2020, 2015-2016, Article 10).

As already mentioned, the amount of incentive funds per registered farm in the Republic of Srpska can not be higher than 25,000 BAM, or 12,800 Euros. In Serbia, this maximum is up to 20,800 Euros, which shows a difference of 8,000 Euros, which is important if the interest of an individual (agricultural producer) is taken into account. If the given incentive funds are compared with those allocated by the Republic of Croatia, there is a huge difference, which indicates that the allocations in Croatia are 5.5 times higher than in the Republic of Srpska. Of course, such a high amount of incentive funds in Croatia is partly provided from the funds of the European Agricultural Fund for Rural Development (EAFRD), and partly from the budget of the Republic of Croatia, where the EAFRD participates with 85% of the shares, and the Republic of Croatia with 15%.

The Ministry of Agriculture, Forestry and Water Economy of the Republic of Srpska regulates the issues of insurance in agriculture through funds for financing measures for the improvement of agriculture, established by the Medium-Term Strategy of Agriculture for the Republic of Srpska and measures of the agricultural policy of the Republic of Srpska (Regulation on the provision and direction of funds for encouraging the development of agriculture and villages, 2002) Agricultural policy measures are the economic measures undertaken by the Republic of Srpska, which achieve the objectives of agricultural policy. These measures must be harmonized and must be implemented according to the principle of equality and neutrality. Measures of agricultural policy with regard to the area of action are divided into: market and price policy measures, structural policy measures, land policy measures and measures of incentives in agriculture. (Law on Agriculture, 2006, Article 5).

Within this division, only structural policy measures concern the issue of insurance in agriculture, as they constitute a set of measures that encourage the efficiency of agricultural production to ensure stable income and satisfactory standard of farmers in the rural area, and the balanced development of agricultural regions and rural areas. One of such measures is also "support to the system of anti-hail protection and other measures of protection of crops" (Law on Agriculture, 2006, Article 13).

The Strategy for the Development of Agriculture and Rural Areas of the Republic of Srpska also contains objectives and measures for implementing the production support policy. It is stated that increasing the volume and productivity of agricultural production and ensuring the stability of the income of agricultural producers can also be influenced by the improvement of the insurance system in agriculture and this is one of the strategic goals in agriculture in the Republic of Srpska (Strategic Plan for the Development of Agriculture and Rural Areas of the Republic of Srpska 2016- 2020, 2015).

Agricultural insurance in the Republic of Srpska is underdeveloped and, still, very little is being applied in the function of compensating for lost income in case of harmful events. Therefore, in the program period, the goal is to try to implement a measure of subsidizing agricultural insurance costs with the aim of improving and increasing agricultural areas, facilities and cattle "covered" with agricultural insurance. Apart from subsidies for completed insurance policies, efforts are being made to adjust the supply of agricultural insurance to the needs of agricultural producers and to promote the benefits of its use in various target groups - fruit growers, vegetable growers, livestock farmers (Strategic Plan for Agriculture and Rural Development of the Republic of Srpska 2016-2020, 2015).

State allocation in the form of emergency financial assistance for the remediation of large-scale damages is increasing, so this type of support to agricultural producers has recently taken a more significant place than in the previous period. However, natural disasters and climate change imply the need to introduce new forms of support for agricultural production so that the negative consequences of such events are as small as possible.

The Ministry of Agriculture, Forestry and Water Economy of the Republic of Srpska implements measures for co-financing the cost of anti-hail protection in the function of improving the efficiency and expansion of the anti-hail protection system, with the inevitability to increase the participation of agricultural producers in proportion to the benefits derived from that system (Government Decision on the amount of fees for co-financing the anti-hail protection, 2010). An effective way of preventing the consequences of the hail in plant production is the anti-hail protection that is being carried out by the public enterprise "Anti-hail prevention of the Republic of Srpska a.d. Gradiška" on the territory of the Republic of Srpska. This system functions on the principle of co-financing of costs by the Ministry, local government units and agricultural holdings (Regulation on the conditions and method of achieving financial incentives for the development of agriculture and villages, 2017, Article 47).

Although the Agricultural Development Strategy of the Republic of Srpska foresees significant investments in the system of anti-hail protection, i.e. the protection of crops from the hail, it should be kept in mind that the hail is not the only natural disaster, and that it is necessary to work on the development of other systems of protection of agricultural producers. One way of protecting agricultural producers against the risks that can cause damage to agricultural crops is, as we have already mentioned, insurance of agricultural crops.

#### The contract on insurance of crops and fruits in agriculture

The contract on insurance of crops and fruits is a way of securing agricultural producers in the case of certain natural disasters when they suffer material damage on their crops or fruits. Therefore, in addition to the agricultural policy measures adopted by the Government of the Republic of Srpska, or the Ministry of Agriculture, Forestry and Water Economy, which are aimed at protecting agricultural producers, such as support for the system of anti-hail protection and other measures for the protection of crops. Agricultural producers can protect their financial security by closing a contract on the insurance of agricultural crops with one of the insurance organizations operating in the territory of the Republic of Srpska and Bosnia and Herzegovina.

Under the insurance contract for crops and fruits, the insurer is obliged to pay the indebtedness indicated in the insurance policy if the insurance premiums have already been paid and the insured is obliged to regularly pay the insurance premium. However, when the insured case arises, that is, when the insurance risk is realized, the insured is obliged to notify the insurer immediately and within three days at the latest, that an insured case arose, and if the notification is made by telephone or verbally, it must be confirmed in writing within three days. The application must indicate the day and time of the damage, as well as the crops, areas and plots. If crops or fruits are damaged during harvest, the insured is obliged to perform harvesting or harvesting before the damage assessment in order to prevent further damage increase. When the damaged crop or fruit has to be harvested or picked, and the damage assessment has not yet been carried out, the insured is obliged to leave the control samples on the lower, middle and upper part of the plot diagonally, of at least 10m2 of damaged crop, that is, unprocessed fruit, and in vineyard at least 10 grapevine trees and in the orchard several trees unpicked on the lower, middle and upper part of the vineyard or the orchard in the diagonal, which will serve as the basis for the assessment of the damage; in crops where harvesting is done by machine-harvesting, the insured must leave the control samples in the form of a strip. The insured is also obliged to provide the insurer with all the information and evidence at their disposal, that are necessary for determining the sample, scope and amount of damage (General conditions for insurance of crops and fruits, "Dunav osiguranje", 2012).

For most insurance companies, there is an identical rule that the subjects of insurance in the insurance contract for crops and fruits are: crops (including double cropping, subcrops and intercrops); fruits, meadow grass, herbs, ornamental plants, orchards and vineyards,

young orchards and vineyards before entering the genus; fruit, grapes and forest planting material; young forest culture up to the age of 6; willows for plaiting and reed.

The main hazards in the insurance of crops and fruits are the following: the danger of hail, fire and lightning, while crops and fruits are unharnessed and unpicked, so that the insurer pays for damage or destruction of insured crops and fruits.

In addition to the aforementioned general conditions of insurance there are also special conditions related to supplementary insurance, so the insurer is obliged to pay compensation from insurance and for damages:

- for all crops and fruits - from floods, spring frost and storms,

- for fruits and grapes - from the salinity.

The insurer is obliged to pay insurance compensation for damage only in the loss of yield, and not in quality, except for: hemp and fiber flax, broom sorghum, fruit, vineyard and forest planting material and planting material of ornamental grass and trees, plaques for plaiting, in which cases they are compensated for the loss of quality. The insurance fee for damage caused by the loss of quality in the tobacco which is insured under special conditions, the insurer is also obliged to pay. The insurer is obliged to pay compensation from insurance and for damages that occur and loss of quality in: crops and seeds for the production of seeds, fruits, table grapes. Insurance from supplementary risk can be concluded only if the insurance against basic risks is previously concluded, unless the crop is secured, i.e., protected by the hail network (General conditions for insurance of crops and fruits, "Dunav osiguranje", 2012, Article 15).

#### **Insurance companies**

Insurance contracts can be concluded between agricultural producers and insurance companies. An insurance company, which is used by a legislator, is a joint stock company registered in the Republic of Srpska or a mutual insurance company registered in the Republic of Srpska, as well as an insurance company that is not from the Republic of Srpska, but performs insurance activities in accordance with the law (Law on Insurance Companies, 2005, Article 2).

The founders of the insurance company can be domestic and foreign persons, individuals and legal entities. Foreign capital may also be invested in insurance companies in the Republic of Srpska, because according to the Law on Insurance Companies, an insurance company may be an insurance company that is not from the Republic of Srpska, but performs activities in accordance with the Law. A foreign insurance company that has its head office outside of Bosnia and Herzegovina may perform an insurance activities in the Republic of Srpska in the form of a branch office, after obtaining a license for work from the Insurance Agency of the Republic of Srpska and registering it in the court register. From the cited legal provisions it follows that the insurance activities in the Republic of Srpska can be performed by insurance companies established in Bosnia and Herzegovina by foreign investors, as well as existing insurance companies whose head office is outside

Bosnia and Herzegovina. The Insurance Agency of the Republic of Srpska maintains a register of insurance companies whose head office is located outside Bosnia and Herzegovina, which established branches in the Republic of Srpska (Krstić, 2016).

There are 14 registered insurance companies in the territory of the Republic of Srpska, 11 of which carry out non-life insurance activities, and three insurance companies perform non-life and life insurance activities. However, in addition to those listed in the Republic of Srpska, there are also 11 affiliates of insurance companies from the Federation of Bosnia and Herzegovina, while seven insurance companies based in the Republic of Srpska operated through the branches in the Federation of Bosnia and Herzegovina. Almost all insurance companies provide insurance services when it comes to insurance of crops and fruits, however, bearing in mind that the situation on the territory of Bosnia and Herzegovina with this type of insurance is very bad, most of the insurance companies, except for having insurance conditions, do not have actual activities in regarding the issue of insurance policies (Report on the state of insurance in the Republic of Srpska for the period 01.01.2016 - 31.12.2016, 2017).

## **Research results and discussion**

Bearing in mind that the insurance of crops and fruits in the Republic of Srpska is not represented to the necessary extent, despite significant climate change, and that financial losses are recorded from year to year due to the damage caused to agricultural producers by weather conditions, the authors surveyed agricultural producers in order to examine the causes that are responsible for a small number of closed agricultural insurance policies. Also, the survey helped to see how economically have been justified certain legal solutions, as well as the rules that regulate the insurance contract, in order to gain an insight into the proposals of new solutions.

Bearing in mind the area of land, shown in hectares, which is processed by the surveyed agricultural producers, it shows that an adequate representative sample for this research has been provided. Namely, on the territory of Semberija, or the city of Bijeljina, about 50,000 hectares of land are being processed, and the survey covered 2.42% of the total surface that is being processed.

No	The structure of agricultural land	Hectars	Livestock types	Number
1	Arachnids and gardens	1,090.10	Cattle	5,015
2	Orchards	83.15	Pigs	1,000
3	Vineyards	0.00	Sheep	70
4	Meadows	20.00	Goats	1
5	Pastures	1.00	Horses	0
6	Greenhouses	40.00	Poultry	2,115

**Table 3.** The structure of agricultural land that the respondents process and the number of livestock heads

Source: Author's survey

The survey covered 35 villages from the area of Semberija, or the city of Bijeljina: Gradac, Batković, Magnojević, Velika Obarska, Ljeskovac, Trnjaci, Donje Crnjelovo, Kriva Bara, Dazdarevo, Donje Crnjelovo, Vršani, Donji Dragaljevac, Batar, Triješnica, Donja Čađavica, Patkovača, Modran, Johovac, Mala Obarska, Gornji Dragaljevac, Balatun, Golo Brdo, Amajlije, Zagoni, Popovi, Dvorovi, Međaši, Gornja Čađavica, Kojčinovac, Janja, Srednji Dragaljevac, Brodac, Glogovac, Ugljevička Obrijež and Suvo Polje.

The results of the survey show that respondents are not only targeting one of the agricultural branches, but most of them are engaged in mixed production. Thus, out of the total number of respondents from the territory of the city of Bijeljina, as many as 95.4% of the respondents are engaged in crop production, the similar situation is with livestock production of 90.8%, while the relatively lower interest is in vegetable farming - 54.0%, fruit growing - 32.2%, beekeeping - 9.2% and other 14.9%. From the above data it can be seen that the majority of respondents are equally engaged into crop farming and livestock breeding.

Approximately 4/5 of the surveyed agricultural producers, i.e. 80.5% of them, declared that their agricultural activity was the main activity, that is, it was the main source of income for agricultural production, which led to the conclusion that these were serious agricultural producers. The percentage of those whose agricultural production is not the main source of income is 10.3%, and only 9.2% of the respondents stated that they make partial income in agricultural production. The information that states that these are serious agricultural producers is the fact that 90.8% are registered households.

More than half of the surveyed producers gave the answer that earnings from agriculture do not provide a high standard of living, or that they can not live well from these revenues. This was confirmed by 56.3% of the respondents, while 25.3% answered that the income from agriculture can be sufficient for normal living, with 18.4% of the respondents not providing a precise answer.

No	The cause of the damage	Suffered damage in %	Did not suffer damage in %	Partial damage %
1	Flood	86.2	13.8	/
2	Drought	44.8	55.2	/
3	Hail	16.1	83.9	/
4	The irresponsibility of the state	2.3	97.7	/
5	Death of livestock	3.4	96.6	/
6	No damage	2.3	97.7	/

**Table 4.** Risks from which the respondents most often suffered damage in the previous period

Source: Author's survey

As can be concluded from the data presented in Table 4, the largest number of respondents suffered damage in the previous period, i.e. 97.7% of them. However, despite this fact, the percentage of insurance of agricultural crops and fruits is still EP 2017 (64) 4 (1555-1570) 1565

at a very low level. This was confirmed by the survey, where 96.6% of respondents answered that in the last five years they did not use insurance in agriculture, while only 3.4% stated that they had insurance policies.

What is particularly emphasized as a negative phenomenon when it comes to the contract for the insurance of agricultural crops, fruits and animals, is the inaccessibility of the necessary information on certain possibilities that can improve the image in this activity. Namely, the fact is confirmed that there is a poor incentive or incentive awareness of the state for insurance in agriculture, as only 28.7% of the respondents confirmed that they were aware of the discounts, i.e. the subsidies allocated by the Ministry to agriculture insurance, while 71.3% did not have information about it. It also showed that there is a lack of interest in insurance among the agricultural producers themselves (in this case, the respondents), because 9.2% of respondents confirmed that they were familiar with the insurance conditions provided by individual insurance companies, while 56.3% of the respondents were not familiar with the conditions provided by the insurance companies, and 34.5% answered that the information of the insurance conditions were insufficient to opt for the use of these services.

The above arguments point to the conclusion that the poor situation of the coverage of insurance of crops, fruits and animals in agriculture in the Republic of Srpska is mostly affected by insufficient information, as well as the insufficient interest of agricultural producers for this type of insurance. However, the survey also identified other reasons why agricultural producers do not insure their agricultural crops, fruits and animals, as shown in Table 5.

No	Reason for not-insuring	Answered with YES	Answered with NO
1	Lack of financial resources	51.7%	48.3%
2	Distrust towards insurance companies	37.9%	62.1%
3	Insufficient information about positive effects	24.1%	75.9%
4	High insurance premiums	17.2%	82.8%
5	No need for insurance	5.7%	94.3%
6	Other	3.4%	96.6%

Table 5. Reasons why the surveyed farmers do not insure crops, fruits and animals

Source: Author's survey

Table 5 shows a collision in responses under numbers 1 and 4, as both involve financial allocations, so financial resources can be used as a reason for not using the insurance. This data confirms the claim that, to a large extent, the poor disposal of information for agricultural producers affects the low level of insurance of crops, fruits and animals in the Republic of Srpska.

In order to make the research more credible in terms of the causes that affect the low level of insurance in agriculture, a questionnaire was formed in a way that questions were of conditional character, which in a clearer way pointed to the perspective of insurance in agriculture in the Republic of Srpska. Namely, to the question that if the

insurance of crops, fruits and animals would be a condition for the safe placement of their products, would the agricultural producers close an insurance contract in that case, 57.5% of the respondents answered that they would choose to take insurance, 42.5% said they would not. The second was the requirement for obtaining certain subsidies, where 41.4% of the respondents answered that they would insure crops if this would be a condition for obtaining certain subsidies. However, 58.6% of respondents did not consider this reason as motivating to decide to insure their crops, fruits or animals. Even if the insurance would be a condition for further dealing with certain agricultural activities, only 24.4% of the respondents said they would insure crops, while 75.6% of the respondents gave a negative response. A similar response was also given when it comes to the terms of obtaining favorable agricultural bank loans, where 26.4% said they would ensure their crops and 76.3% would not. The negative attitude of the surveyed agricultural producers in terms of insurance is confirmed by the fact that only 16.1% of the producers would ensure their crops, fruits or animals if this would be a condition for registration of agricultural holdings, while 83.9% responded negatively. Regarding the above issues, there is a relative coexistence in the responses, which can be noticed in the issues related to the condition for further engagement with this activity, that is, the conditions for registration of the holding.

#### Conclusion

Based on the analysis of regulations and conditions in the field of insurance of agricultural crops, fruits and animals in the Republic of Srpska, it can be concluded that the official institutions, primarily the Government and the Ministry of Agriculture, Forestry and Water Economy of the Republic of Srpska, take certain actions necessary to create as favorable climate in the sector of insurance of agricultural crops, fruits and animals. In addition to the economic policy measures related to the allocation of funds for the support to the system of anti -hail protection, the budget of the Republic of Srpska has also provided funds for co-financing insurance premiums for primary agricultural production, which are provided under the insurance contract, as an obligatory legal relationship, between the agricultural producer and the insurance company. However, when these funds are compared with funds allocated for the same purpose by countries in the environment such as, for example, Serbia and Croatia, it is noticed that these funds in the Republic of Srpska are insufficient. This leads to the conclusion that one of the factors for ensuring better conditions for the insurance of agricultural crops, fruits and animals in the Republic of Srpska would be access to European funds in the field of agriculture and rural development, which would provide additional funds to encourage the incentive of primary agricultural production, in which case the insurance contract would became a guarantor of financial security for agricultural producers.

The conducted survey suggests that there is a poor knowledge of agricultural producers about certain agricultural insurance possibilities, among other things, about incentives for securing agricultural purposes. The fact that the relevant institutions publish certain information in the Official Gazette and on their websites does not mean that the

information is really contributed to the producers. It should be kept in mind that most agricultural producers are not able to use sophisticated media. Thus, it is recommended not only to the institutions at the republic and local level, but also to existing insurance companies, to constantly organize seminars in order to increase the level of education of agricultural producers, and therefore make relevant information available to them. It is also necessary to oblige farmers' associations, whose number on the level of the Republic of Srpska is large and who use the budget funds for their work, to pay more attention to the goals for which they were founded, and thus to inform their members (agricultural producers).

The research also points to a very important conclusion, which is that in the attitude of agricultural producers there is a correlation between the insurance of agricultural purposes and the safe market placement of them. It is recommended that a more secure market for the placement of agricultural products is provided by the Chamber of Commerce of the Republic of Srpska, professional organizations and associations, and that special regulations the access to existing markets is conditioned by the insurance of crops, fruits and animals. We think that this would be a significant reason to increase the growth tendency of closed policies in, which would result in multiple benefits.

In addition, taking into account the fact that there is a lack of funds for the Republic of Srpska to participate in the co-financing of insurance premiums in agricultural production on the one hand, and that insurance companies do not have a critical number of insured persons in order to form a secured amount from which the resulting damages would be paid, it would be a good idea to consider the possibility of forming a publicprivate insurance company for crops and fruits.

Considering that there are a large number of agricultural producers in the Republic of Srpska who are seriously engaged in agricultural production, the possibility of forming mutual insurance companies should be considered, which, as an option, is also envisaged by the Insurance Companies Act.

## References

- 1. Agencija za osiguranje Republike Srpske (2017). *Izvještaj o stanju osiguranja u Republici Srpskoj za period 01.01.2016.* do 31.12.2016. godine (available at: http://www.azors.rs.ba/azors/izvjestaji.html).
- 2. Hoag, D. (2010). *Applied Risk Management in Agriculture*, Edition 1, CRC Press Taylor & Francis Group, Boca Raton, London New York.
- 3. Kočović, J., Šulejić P., Rakonjac-Antić T, (2010). Osiguranje, Ekonomski fakultet Beograd.
- 4. Krstić, B. (2016). *Pravni režim stranih ulaganja u Republici Srpskoj stanje i perspektive*, doktorska disertacija, Slobomir Univerzitet Bijeljina, Republika Srpska, BiH.
- \*\*\* (2003), MacGillivray on Insurance Law (edited by Nicolas Legh-Jones, John Birds & David Owen), 10th edition.
- 6. Marović, B., Avdalović, V. (2003). Osiguranje i upravljanje rizikom, Biografika

a.d. - Subotica

- Odluka Vlade o visini naknada za sufinansiranje sistema protivgradne zaštite u Republici Srpskoj, Službeni glasnik, Republika Srpaka, broj 16/2010, 61/2011, 47/2013 i 24/2014.
- 8. Odluka o vrstama osiguranja, Službeni glasnik, Republika Srpska, broj 5/2006.
- 9. Opšti uslovi za osiguranje usjeva i plodova 2012, Dunav osiguranje a.d. Banja Luka, (http://www.dunav.ba/index.php?option=com\_content&view=article&id=9&Itemid=13)
- 10. Pravilnik o uslovima i načinu ostvarivanja novčanih podsticaja za razvoj poljoprivrede i sela, Službeni glasnik, Republika Srpska, broj 31/2017.
- 11. Pravilnik o uslovima, načinu i obrascu zahteva za ostvarivanje prava na podsticaje za premiju osiguranja useva, plodova, višegodišnjih zasada, rasadnika i životinja, Službeni glasnik, Republika Srbija", broj 61/2017.
- 12. Pravilnik o provedbi mjere M17 "Upravljanje rizicima", podmjere 17.1. "Osiguranje usjeva, životinja i biljaka" iz Programa ruralnog razvoja Republike Hrvatske za razdoblje 2014. – 2020, Narodne novine, Republika Hrvatska, broj 135/2015, 78/2016 i 109/2016.
- 13. Rohrbach, W. (2008). *Istorija osiguranja luksuz ili doprinos branši?*, Revija za pravo osiguranja UDK: 368:17 (Naučna polemika).
- 14. Rohrbach, W. (2013). *Etika i osiguranje*, Udruženje za pravo osiguranja Srbije UDK: 368:17 Naučna polemika.
- 15. Strateški plan razvoja poljoprivrede i ruralnih područja Republike Srpske 2016-2020., Vlada Republike Srpske, 2015., Vlada Republike Srpske, Banja Luka, Republika Srpska, BiH, (available at: http://www.vladars.net/sr-SP)

Cyrl/Vlada/Ministarstva/mps/%d0%bc%d0%b8%d0%bd%d0%b8%d1%81 %d1%82%d0%b0%d1%80%d1%81%d1%82%d0%b2%d0%be/Documents/ Strategija%202020.pdf).

- 16. Upustvo za primjenu odluke o vrstama osiguranja, Službeni glasnik, Republika Srpska, broj 44/2007.
- 17. Vasiljević, M. (2001). *Poslovno pravo*, Udruženje pravnika u privredi SR Jugoslavije, Beograd, SRJ Jugoslavija.
- 18. Vasiljević, M. (2014). *Trgovinsko pravo*, Udruženje pravnika u privredi Republike Srbije, Beograd, Srbija.
- 19. Zakon o obligacionim odnosima (ZOO), Službeni glasnik, Republika Srpska, broj 17/1993, 3/1996, 37/2001 dr. zakon, 39/2003 i 74/2004.
- 20. Zakon o poljoprivredi, Službeni glasnik, Republika Srpska, broj 70/2006.
- 21. Zakon o društvima za osiguranje, Službeni glasnik, Republika Srpska, broj 17/2005, 01/2006, 64/2006, 74/2010 i 47/2017.
- 22. Zakon o obezbjeđenju i usmjeravanju sredstava za podsticanje razvoja poljoprivrede i sela, Službeni glasnik, Republike Srpske, broj 43/2002 i 106/2009.

## UGOVOR O OSIGURANJU KAO OSNOV SIGURNOSTI POLJOPRIVREDNIH PROIZVOĐAČA U REPUBLICI SRPSKOJ

#### Boro Krstić 4, Zorica Vasiljević5, Miroslav Nedeljković6

#### Rezime

Rad ima za cilj da ukaže na uticaj ugovora o osiguranju na sigurnost poljoprivrednih proizvođača u Republici Srpskoj, polazeći od pretpostavke da je osiguranje useva, plodova i životinja faktor koji podrazumeva solidarno otklanjanje štetnih posledica u slučaju nastanka štete. Ovakav stav autora bazira se na činjenici da zaključivanjem ugovora o osiguranju u poljoprivredi, deo odgovornosti se prebacuje na državu (učešćem u sufinansiranju premije osiguranja), zatim na društvo za osiguranje (sanirajući štetu iz osiguravajuće mase) i na kraju i na poljoprivredne proizvođače. Imajući u vidu da je osiguranje veoma prisutno u svim segmentima modernog društva, što implicira veliku raznolikost oblika osiguranja, autori u radu polaze od jedne uopštene strukture i klasifikacije osiguranja, koja pozicionira i mesto osiguranja poljoprivrednih namena. Da bi se došlo do realne slike postojećeg stanja osiguranja u poljoprivredi Republike Srpske, izvršena je analiza pravne regulative koja reguliše navedenu problematiku, a putem anketnog istraživanja poljoprivrednih proizvođača analizirani su razlozi koji utiču na slabu zainteresovanost za ovaj segment osiguranja kao i na mali broj zaključenih polisa osiguranja sa društavima za osiguranje. Na osnovu utvrđenog stanja, u radu su date preporuke za poboljšanje stanja i predlozi za dolaženje do boljih rešenja, koja bi sigurnost poljoprivrednih proizvođača podigla na jedan viši nivo.

**Ključne reči:** osiguranje u poljoprivredi, ugovor o osiguranju, poljoprivredni proizvođači, polisa osiguranja

<sup>4</sup> Docent, dr Boro Krstić, Univerzitet Bijeljina, Poljoprivredni fakultet, Republika Srpska, BiH, Tel.+387 65 237 072, E-mail: <u>direktor@ubn.rs.ba</u>

<sup>5</sup> Redovni profesor, dr Zorica Vasiljević, redovni profesor, Univerzitet u Beogradu, Poljoprivredni fakultet, Republika Srbija, +381 64 14 39 942, E-mail: <u>vazor@agrif.bg.ac.rs</u>

<sup>6</sup> Doktorant Miroslav Nedeljković, Univerzitet u Novom Sadu, Poljoprivredni fakultet, Republika Srbija, +387 66 893 935, E-mail, <u>poljoprivreda.ubn@gmail.com</u>

# UDC 338.43:63 ECONOMICS OF AGRICULTURE

## CONTENT

1.	Adriana Radosavac, Desimir Knežević ECONOMIC IMPORTANCE OF USE OF PESTICIDES IN WHEAT PRODUCTION
2.	Berhe Gebregewergs, Muuz Hadush DOES CLIMATE CHANGE AFFECT PRICE OF VEGETABLES: EVIDENCE FROM TIGRAI, NORTHERN MOST ETHIOPIA1335
3.	Grujica Vico, Aleksandra Govedarica-Lučić, Zoran Rajić, Radomir Bodiroga, Ivan Mičić, Silvija Zec Sambol, Marija Mičić <b>MULTI ATTRIBUTE ASSESSMENT APPROACH</b> <b>IN VEGETABLE PRODUCTION</b>
4.	Igor Trandafilović, Vesna Conić, Aleksandra Blagojević IMPACT OF DEMOGRAPHIC FACTORS ON ENVIRONMENTALLY CONSCIOUS PURCHASE BEHAVIOUR1365
5.	Imre Milán HarcsaSTUDY ON THE POTENTIAL OF SUBCONTRACTPALINKA DISTILLATION
6.	Jelena Andrašić, Vera Mirović, Nada Milenković, Branimir Kalaš, Miloš Pjanić IMPACT OF TAKEOVER PROCESS ON EMPLOYEES - EVIDENCE FROM FOOD, RETAIL AND FINANCIAL SECTOR1393
7.	Jelena Birovljev, Danilo Đokić, Bojan Matkovski, Žana Kleut ECONOMIC PERFORMANCES OF AGRICULTURE
	OF CEFTA AND FORMER CEFTA COUNTRIES

9.	Mile Peševski, Zoran Milovančević THE CHANGES IN THE USAGE OF AGRICULTURAL LAND IN EASTERN REGION OF REPUBLIC OF MACEDONIA
	BETWEEN 1991 - 2030
10.	Odjuvwuederhie Emmanuel Inoni, 'Oraye Dicta Ogisi, Felix Odemero Achoja PROFITABILITY AND TECHNICAL EFFICIENCY IN HOMESTEAD CATFISH PRODUCTION IN DELTA STATE, NIGERIA
11.	Olja Munitlak - Ivanović, Jovan Zubović, Petar Mitić RELATIONSHIP BETWEEN SUSTAINABLE DEVELOPMENT AND GREEN ECONOMY - EMPHASIS ON GREEN FINANCE AND BANKING
12.	Petar Munćan, Dragica Božić FARM SIZE AS A FACTOR OF EMLOYMENT AND INCOME OF MEMBERS OF FAMILY FARMS
13.	Rade Popović, Mira KovljenićEFFICIENCY OF WHEAT PRODUCTION ON FARMSIN THE REPUBLIC OF SERBIA
14.	Radovan Damnjanović, Snežana Krstić, Milena Knežević, Svetislav Stanković, Dejan Jeremić THE DISCRIMINANT ANALYSIS APPLIED TO THE DIFFERENTIATION OF SOIL TYPES
15.	Slavica Otović, Dunja Demirović, Kristina Košić, Aleksandra Vujko FOSTERING ENTERPRENUERSHIP AT HIGH SCHOOLS: A CASE OF RURAL AREAS IN VOJVODINA (SERBIA)
16.	Vladimir Ilić, Ivan Bauer, Anastazija Tanja Đelić, Aleksandar Nešković INSTITUTIONAL SUPPORT FOR STRENGTHENING ENTREPRENEURSHIP IN AGRICULTURAL PRODUCTION OF THE REPUBLIC OF SERBIA
17.	Boro Krstić, Zorica Vasiljević, Miroslav Nedeljković INSURANCE CONTRACT AS THE BASIS FOR THE SAFETY OF AGRICULTURAL PRODUCERS IN THE REPUBLIC OF SRPSKA1555
18.	Dejan Sekulić, Aleksandar Petrović, Vladimir Dimitrijević WHO ARE WINE TOURISTS? AN EMPIRICAL INVESTIGATION OF SEGMENTS IN SERBIAN WINE TOURISM

19.	Milan Beslać, Ćorić Goran FINANCIAL AND PRODUCTION ASPECTS OF GENETICALLY MODIFIED ORGANISMS
20.	Mlađan Maksimović, Darjan Karabašević, Miodrag Brzaković, Pavle Brzaković THE EFFECTS RESULTING FROM THE APPLICATION OF THE CONCEPT OF THE SUSTAINABLE DEVELOPMENT OF RURAL TOURISM ON STARA PLANINA
21.	Vesna Popović, Predrag Vuković, Milivoje Ćosić FOOD SAFETY AND QUALITY POLICY IN THE REPUBLIC OF SERBIA
22.	Radovan Pejanović, Danica Glavaš-Trbić, Mirela Tomaš-Simin PROBLEMS OF AGRICULTURAL AND RURAL DEVELOPMENT IN SERBIA AND NECESSITY OF NEW AGRICULTURAL POLICY1619
23.	Saša Marković, Slavoljub Vujović, Aleksandar Damnjanović MARKETING AND HIGHER EDUCATION - CONDITION IN SERBIA
24.	Semir Vehapi, Marina Milanović THE EFFECT OF MARKET ORIENTATION ON BUSINESS PERFORMANCE OF SERBIAN ORGANIC PRODUCERS
25.	Suad Bećirović, Šemsudin Plojović, Enis Ujkanović, Senadin Plojović CHALLENGES AT STARTING AN AGRIBUSINESS IN THE HILLY - MOUNTAINOUS REGIONS OF SOUTHWEST SERBIA
26.	Vladimir Zakić, Vlado Kovačević, Jelena Damnjanović SIGNIFICANCE OF FINACIAL LITERACY FOR THE AGRICULTURAL HOLDINGS IN SERBIA
27.	Željko Bjelajac, Marijana Dukić Mijatović, Željko Vojinović PROTECTION OF LAND IN THE REPUBLIC OF SERBIA AND ECOLOGICAL SECURITY WITH REGARD TO STRATEGIC AND LEGAL FRAMEWORKS