

Risk in Animal Insurance in Republic of Macedonia with Special Review to Fish Insurance

Trajan Dojcinovski^{1*}, Nikolce Jankulovski¹, Katerina Bojkovska¹, Goran Mihajlovski¹

¹ Faculty of Biotechnical Sciences, University "St. Kliment Ohridski", Bitola, Macedonia

*Corresponding author: Trajan Dojcinovski, PhD, Faculty of Biotechnical Sciences, University "St. Kliment Ohridski" Bitola, R. Macedonia, e-mail: tdojcinovski@gmail.com

Abstract

Animal insurance is quite important because animal husbandry as one of the important industries is exposed to certain risks that can cause major damage. Risks in animal husbandry are the result of percussion, forced slaughter and danger of an accident.

The taking of preventive measures for preventing the occurrence of damages, caused by the risks of the production itself, is in the function of saving and protecting the livestock production itself. Compensation for damage to animals is most often compromised with animal insurance, since the damage caused can be with far-reaching consequences, not only in the concrete production, but also in the production cycle itself. Unlike other animals, fish insurance is done in fish that are grown in a special technological process in specially built swimming pools or cages, for damages caused by illness or accident. The risk of an accident in fish involves poisoning fish, lightning strikes and clogging of inbound canals or grids.

Key words: risks in livestock husbandry, need for insurance, general insurance provisions, premium tariff, need for fish insurance and their specificity of insurance.

Animal insurance

In animal insurance, the subject of insurance according to the General Conditions of Insurance are healthy domestic animals, animals that are reared under appropriate zoogenic conditions, which are properly used, and animals with a certain age. Insurance in equidae (horses, mares, mules and donkeys) is done with an age of 10 days up to the age of 18 or up to 21 years of age, with continuous insurance of 15 years of age, in cattle and buffalo with age from 10 days to 12 years or up to 15 years old with uninterrupted 9-year-old insurance, in sheep and goats aged 3 months to 6 years old, and in pigs aged 21 days and the smallest weight of 5 kg to 7 years old. The other types of animals are insured under the special conditions for animal insurance (Dojchinovski, 2005).

In accordance with the Special conditions for animal insurance, the animals are insured against the dangers of being victimized and forced slaughter of animals and the risks of an accident.

The dangers of being victimized and involuntarily slaughtering of animals, involve death due to illness or accident, forced slaughter due to illness or accident, etc. The danger of accident include at animal include damages that can occur in animals from the risks of fire, lightning, explosion, flood, storm, tramp with various vehicles, blow from some objects, damage from mutilation, external injuries from falling and slipping, drowning in water and mud, injuries from wild beasts, snake and beating bites, electric shock, accidental heat or freezing, poisoning with chemical poisons, etc.



Tariff for animal insurance premiums and application of premium rates

The premium rate of insurance (insurance coverage) in animals is a sum of premium rates in a type of insurance or in all insurance, carried out by an insurance company, in the case of animal insurance. The premium for the animal insurance premium is at the same time a pricelist for the insurance premium, which determines the price of the risk of animal insurance. Animal insurance tariffs are adopted by insurance companies with a special rulebook, which contains the General and Special Provisions and Conditions (Principles) for animal insurance premiums, on the basis of which a policy is made and concludes an insurance contract (Dojchinovski, 2010).

In animal insurance, premium rates in the insurance tariff are classified into 6 groups of hazards, depending on the type and category of animals, of which the five groups of hazards refer to insurance of adult animals, while the sixth group of hazards applies to Insurance of young animals. The distribution of animals in their insurance in five groups of hazards, is carried out depending on the size of the risk. For that purpose, insurance companies adopt their own criteria for the classification of the species and category of animals. Thus, in the first group of hazards, with the lowest premium rate, are animals reared in the best zoohygienic conditions, controlled environment and good veterinary protection, while in the fifth, last group of dangers with the highest premium rate are included animals reared in the weakest zoohygienic conditions and with difficulty in treatment. The sixth group of dangers in animal insurance is applied in young animals with duration of insurance in foals from 10 days to 6 months, in calves from 10 days to 2 months, calves in white fattening from 10 days to 3 months and in piglets from 21 days and the smallest weight of 5 kg to 2 months age.

General and special provisions of the animal insurance premium tariff

In addition to the general provisions of the animal insurance tariff, in which the general conditions and principles for the application of insurance premiums

are entered, the insurance companies also adopt special provisions of the tariff for the animal insurance premium with special regulations, which shall apply to the following tariff groups and insurance risks: insurance of animals from risk of death, forced slaughter or killing due to illness or accident; Insurance of animals from risks during quarantine stay; Animal insurance against castration and ovariectomy risks; Insurance of animals from risks during the holding of exhibitions; Insurance of animals from risks at a time when they are in collection; Insurance of animals intended for slaughter; Insurance of sheep from danger sickness and accident; Insurance of bees; Insurance of dogs; Insurance of dogs in connection with vaccination and degelmination; Insurance of exotic animals, inside and outside zoos; Insurance of male breeding heads from the risk of loss of breeding ability; Insurance of otters; Bird or chicken insurance; Insurance against risk losing the breeding ability of heifers and cows; Insurance of animals at risk of loss of calf and foal during childbirth; Trout insurance; Insurance of carps etc.

Insurance of trout (Salmonidae) and carps (Cyprinidae)

Fish trout insurance is provided for healthy trout fish, with a minimum length of 10 cm, which are grown in a special technological process in specially built swimming pools or cages, for damages caused by illness or accident. The risk of trotting in trout includes fish poisoning, lightning strikes and clogging of inbound canals or grids. The damage caused by the escape of the fish, in case of flood and storm, is compensated with a special surcharge (Nikolovski & Danev, 2001).

The sum of insurance for fish trout is different depending on the way they are used. Thus, for trout used for breeding, the amount of insurance is determined by weight and price per kilogram of live weight, while in trout while fattening, the amount is determined on the basis of the weight that will be obtained at the end of fattening insurance and the contract price of 1 kg of live weight or on the basis of the average weight to be obtained at the end of the fodder



and the agreed price. The amount of insurance can't be higher than the market value of the fish.

In this type of insurance, the insured has an obligation to keep accurate records of the date of placing trout for fattening or breeding, the number, length and weight of trout in the objects, daily and monthly loss, number and weight of sold trout, to indicate the number at the pool or cage, to keep records of the number and weight of trout (daily and monthly) and the number and weight of the fish removed from the cage or the pool, to keep records of the temperature of the water and the air, the amount of oxygen, nutrition data and records for used drugs, treatments and the performed chemical analysis of the water. The place of insurance of trout fish is the building where the fishes are located. The damage is determined by the insured, the insurer and the veterinarian doctor, and by determining the damage caused, the circumstances under which the damage occurred. The damage to the fish is determined and liquidated based on the true weight of the trout on the day of the killing and the agreed price for 1 kilogram of fish.

The premium rate for fish insurance depends on the achieved technical results of the fish insurance and applies to the amount of insurance, where the insurance is performed for one year or for one tour. During the duration of the insurance of fish from one year the insurance is performed on the average value of the fish. In conditions of insurance of fish from risk of escaping fish due to flood, the insurance rate is increased by 20%. The insurance of carp fish (Cyprinidae) is done in healthy carps (white amur, bighead carp, catfish, etc.) intended for breeding or fattening in the length of at least 10 cm, grown in fishponds or cages from damages caused by sickness or accident from poisoning, lightning, clogging of inlet channels or grids, freezing of water and escaping of fish due to flood or overturning of the cage, if they are insured with an additional premium. The amount of insurance for carps shall be determined on the basis of the weight of the carps, multiplied by an agreed price of 1 kg of live weight, where the sum of insurance is calculated by accounting policies. The insurance of the carps,

depending on the type of damage, starts for damages from an accident the next day of the day indicated on the insurance policy, and for damages from the disease after the expiration of the 14th d.

The determination of the damage occurred upon the application of the insured is performed by the insurer and the insured, in the presence of a veterinarian, whereby, in the assessment of the damage, the circumstances for the damage caused are determined. The assessment of damage occurred in carps is done in two phases, as a preassessment, which includes a detailed description of the damage and a definitive estimate, where the damage is determined at the time of catching the fish at the end of the insurance. The amount of damage in carps is calculated on the basis of the weight of the killed carps and the agreed price. When insuring carps, the insured has an obligation to provide continuous veterinary control of fish, to keep accurate records, from which can be seen the day of placing the plow in fattening or breeding, number, length and weight of fish, daily and monthly death, number and weight of fish sold, etc. As with the insurance of trout fish, when insuring the carps, the insured is obliged to keep a record for marking the pool or cage, number and weight of carps (daily and monthly), number and weight of removed fish from the cage or pool, records for water and air temperature, amount of oxygen and nutrition data, required drugs, treatment and chemical analysis of the water. Calculation of the insurance premium for carps is initially done by applying the advance to the premium, while a definite calculation of the premium is calculated at the end of the insurance period or production turnaround of the carps. For carps, intended for fattening, a flotation premium is calculated based on accounting policies, whereby the first computational policy calculates the total value of the scales by weight, the increase in carps for 1 month and the price per 1 kilogram of live weight. In the following accounting policies, the premium is calculated on the basis of increment. The prize for breeding carps is calculated according to the agreed weight and



price. The amount of premium rates for the insurance of carps depends on whether the carps are grown in cages or in open fishing grounds, as well as from the danger groups. In carps insurance, they are divided into four groups of hazards. Thus, the first group of dangers includes carps grown in a modern building with excellent technological process and preventive protection, in the second group of dangers, carps grown in an appropriate facility with registered diseases from previous years enter, in the third group of dangers, a facility that meets the conditions for growing fish and where certain diseases have been registered in the previous year, while in the fourth group of dangers, are included carps reared in facilities with average organization of work and the occasional occurrence of certain diseases. Insurance of carps (cyprinides) according to the special conditions is done by calculating the premium rate the first year is carried out according to the insurance table, while for the following years it is corrected according to the achieved technical results.

Conclusion

The risk in livestock production is a future uncertainty that occurs as a result of influences of certain factors that can cause major damage and adverse economic consequences.

The damages that may arise in livestock production include: death and involuntary slaughter and danger of an accident. For the continuation of the production process, significant financial means are needed, which can be provided by compensating the damage by means of insurance.

The subject of insurance in the animals, according to the General conditions of insurance, are healthy domestic animals, animals that are reared under suitable zoogenic conditions, which are properly used, as well as animals with a certain age.

In animal insurance, premium rates in the insurance tariff are classified into 6 groups of hazards, depending on the type and category of animals, of which the five groups of hazards refer to insurance

of adult animals, while the sixth group of hazards applies to Insurance of young animals.

Fish insurance shall be performed in healthy carps (white amber, bighead carp, catfish etc.) intended for breeding or fattening in the length of at least 10 cm, grown in fishponds or cages from damages caused by disease or accident of poisoning, stroke lightning, clogging of feed channels or grids, freezing of water and escaping of fish, due to flood or overturning of the cage, provided they are insured with an additional premium.

Despite the need for insurance of livestock and fish, the large and unpredictable risks in livestock production that occur in the last years in the Republic of Macedonia, as well as the high premium rates, have significantly reduced the interest of both insurance companies and animal producers.

High premium rates in livestock insurance have a disastrous impact on producers for livestock insurance.

References

- Dojchinovski, T. (2005). Agricultural Insurance, Textbook. Faculty of Tourism and Hospitality, Ohrid, p. 115. [In Macedonian].
- Dojchinovski T. (2007). Agricultural Insurance, textbook, Faculty of Natural History and Food, Ohrid. [In Macedonian].
- Dojchinovski, T. (2010). Insurance in Agro-Food Industry, Textbook. Faculty of Biotechnical Sciences, Bitola, p. 182. [In Macedonian].
- Doreva, E. (2000). Agrarian Economics, Faculty of Economics, Skopje. [In Macedonian].
- Ganchevski, P. (2000). Theory and Practice in the Insurance Business, Mikena, Bitola. [In Macedonian].
- Jovanovski, T. (1997). Insurance Economics, Euro-Mak Company, Skopje. [In Macedonian].
- Nikolovski, A., D. Danev (2001). Insurance with Elements of Actuarial Analysis, Skopje. [In Macedonian].



Milosevic, B. (2009). Assurance of Property and Persons. [In Macedonian]. Egumenovski, P. et al. (1998). Special Agriculture. Culture, Skopje. [In Macedonian]. Insurance Practices for Insurance Companies AD for Insurance "Macedonia" and AD "Vardar" Skopje. [In Macedonian].

View publication stats

Njavro, M., M. Vidic (2001). Crop and fruit insurance in the EU and the US; European Insurance Committee (2002). Committee for Agricultural Risks: Insurance of Agricultural Risks in Europe. AGR, 2002 (06/02), Paris.

Harwood. J., R. Neifner, K. Coble, J. Perry, A. Somwaru (1999). Managing Risks in Farming, Concepts, Reserch and Analisys. Economic Reserch Service Report. USDA, Washington DC, USA.

Organization for Economic Co-operation and Development (OECD) (2000). Income Risk Management in Agriculture, Peris.