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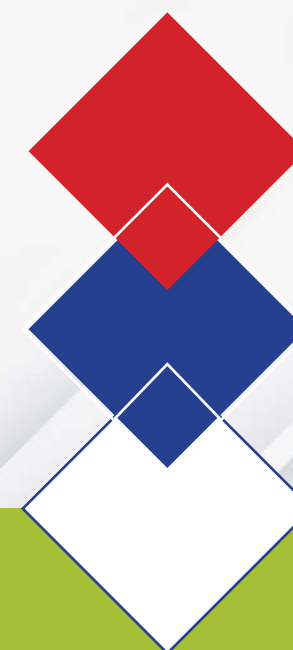
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# AGRICULTURAL INSURANCE



## DIVERSIFYING RISK

*This brochure is brought to you by the Development of Financial System in Rural Areas in Serbia (SRFP) program, which is being implemented by the German Development Bank (KfW) in partnership with Business and Finance Consulting (BFC) and the Serbian Ministry of Agriculture, Forestry, and Water Management.*

This brochure provides a brief overview of the agricultural insurance landscape in Serbia and introduces the means for agricultural producers to set-up and manage this type of activity. In this brochure, the term *agricultural insurance* represents crops, fruit, vegetable and livestock insurance programs.



# Advantages of Agricultural Insurance

The conditioning of credit to farmers varies significantly compared to other types of business loans. Farmers are conditioned to seasonality, when money inflows into accounts. Compared to other types of businesses, money inflows are outward for most of the year in farming, money flowing into a farmer's account may only occur a few times, sometimes even once in a single year. Due to infrequent cash inflows, most farmers must rely on operational bank loans. This reliance on bank loans is one of the main reasons farmers are compelled to use agricultural insurance. Since most assets in farming are usually quite financially significant, they must be paid off over a number of years, the requirement for medium-term financing for machinery, buildings and livestock is important. Owing to the fact that monetary flows into a farmer's account is minimal in any given year, the loss of a crop or livestock can lead to a significant risk in default. Farming is usually profitable over the long-term, one-year can lead to a default due to bad weather or low market prices.

## BASES OF RISK

Farmers are confronted with a number of risks, namely, not withstanding, agricultural production input and output costs' risks. Most risks are reduced by level-headed decision making, other risks are attributed to the cost of doing business. In many cases, risks can be reduced by concluding proper contracts and leveraging insurance for your operation.

Farming and management risk is mainly caused by poor weather conditions (drought, flooding, frost, excessive rain during planting/harvest, hail, etc.), pests, insects and disease. Wide outcomes can affect production due to the using of specified quantity and quality of inputs which can result in various outcomes depending on weather and disease and/or the interaction of these factors.

Production outputs and the cost of input costs are also a significant risk owing to agricultural markets due to worldwide demand and other factors. Globally traded commodities are subjected to the world's market. This is also affected by transport, storage and input cost which will affect local prices.



## AGRICULTURAL INSURANCE COMPANIES IN SERBIA

In Serbia exists seven insurance companies involved with the insuring of agricultural and livestock production:

1. **Dunav Insurance**
2. **Generali Insurance**
3. **DDOR Insurance**
4. **Triglav Insurance**
5. **Wiener Stadtische Insurance**
6. **Sava Insurance**
7. **Globos Insurance**

The largest part of the agricultural insurance market is covered by the first four insurance houses. Crop insurance in Serbia has a great tradition, in the socialist era of Yugoslavia, 80% of all crops were insured.



# The Most Common Crop Risks Covered by Agricultural Insurance in Serbia

Agricultural insurance can cover a wide-variety of crop claims. Following are the most common types of crop insurance covered in Serbia:

- Basic risks—hail, fire and lightning
- Additional risk (in addition to basic): storm (until 15.05./15.06.) and flood
- Special insurance (without basic):
  - Loss of quantity and quality (in the case of table fruit and grapes)
  - Freezing (spring frost)
  - Autumn and winter frost
  - Fruit trees and vines until they become fruit bearing

## TYPES OF CROPS AND FRUITS THAT CAN BE INSURED

- Field crops—wheat, corn, soybeans, sugar beets.
- Fruits—apples, pears, plums, raspberries.
- Vegetables—potatoes, onions, tomatoes, peppers.
- Fruit trees and vines.
- Planting material (nurseries).
- Greenhouses and hothouses.

## BASIC INSURANCE: HAIL, FIRE AND LIGHTNING STRIKE

- The most common risk insured is hail.
- Insurance of the final product (grain, fruit, etc.) is covered.
- All municipalities are divided into areas based on the risk of hail and based on this classification; the insurance premium (cost) is defined:
  - 1 class—the cheapest (Banat)
  - 5–8 class (Arilje, Topola, Cacak)
  - 10 class—most expensive (not in Serbia)
- In regions with frequent occurrence of hail—insurance is more expensive:
  - Least sensitive to hail—corn
- Each crop is divided according to the risk sensitivity classes of hail.
- As mentioned, all municipalities are divided into risk classes for the occurrence of hail.
  - Example: Insurance of wheat crops for the insured value of RSD 100,000:

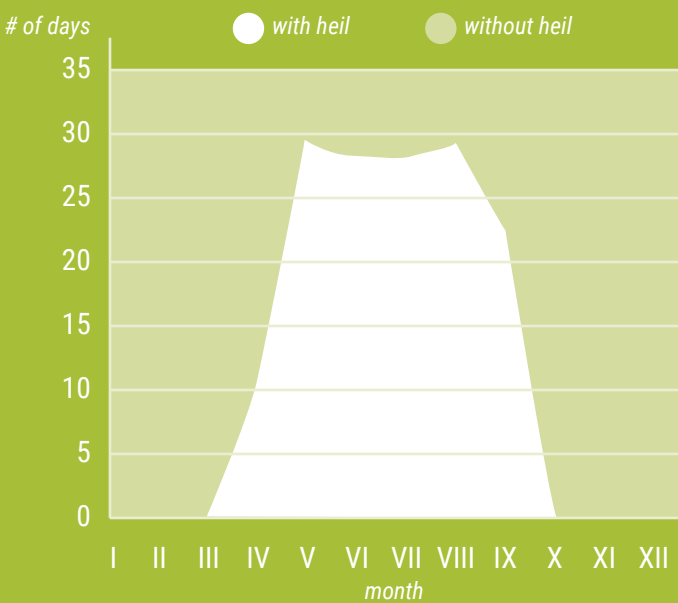
Municipality	Class Risk	RSD/ha
Čurug	2	2,060
Topola	5	4,000



## HAIL SEASON IN THE SERBIAN CLIMATE

The hail season in Serbia lasts more than half a year.

- Due to the effect of climate change, weather anomalies are becoming more frequent, hail is emerging outside the hail expected period.
- The most intense and risky period for hail is from April to the end of September.





# Types of Individual Crop Insurance



## 1. PREMIUM ORIENTATION FOR CROP AND FRUIT INSURANCE (BASIC RISKS)

A farmer has to keep in mind the following statistics when harvesting:

- Loss of grain in process of harvesting with combine: Wheat 3–6%, corn 2–5%, sunflower 5–10%, soybeans 5–10%
- Foreign matter in grain and shattering 2–5%

Cost of insurance is on a level of 2–3%, from expected yields—40% subvention—1.5% end cost to the farmer to insure.

### Lesson learned:

- You lose more in harvest and transport than in insurance.



## 2. ADDITIONAL RISK: STORMS

- Additional risk of storms, it is possible to contract the agreed basic risks (hail) and increase the premium for storm damage. In this case, it is possible to agree on more specific terms with the insurance company due to the adverse effects of storms.
- In the course of determining premiums, data are taken from the nearest meteorological station to your farm. 13.2 m/s wind speed must be established and recorded in order for the realization of the risk to be recognized.

### Example:

- Additional insurance of corn crops against storms (example Čurug).
- Basic corn insurance at a value of 150,000 RSD/ha for hail risk is 2,800 RSD/ha.
- Additional storm insurance amounts to an added 3,500 RSD/ha.
- Total hail and storm risk premiums are 6,300 RSD/ha.



## 3. INDIVIDUAL INSURANCE: SPRING FROST

- Spring frost insurance is contracted until the end of February.
- Insurance conditions: Insurance coverage begins only when two-thirds of the crown petals fall.
- This is a new product of some insurance companies, which has dropped this condition, but the share in the damage is much higher (up to 30%)
- The premium is about 10–15% of the production value.

### Example:

- Insurance of apples from the risk of spring frost in the amount 1,000,000 RSD/ha.
- The insurance premium for frost risk is between 100,000 RSD/ha and 150,000 RSD/ha.



## 4. INDIVIDUAL INSURANCE: INSURING FOR LOSS OF QUALITY AND QUANTITY

Insuring yields of fruits/grapes from loss of quality and quantity.

- In addition to quantity, losses in quality can also be covered by insurance, which is the biggest problem following hail on fruit crops.
- Damage share of 10–15%.
- Insurance conditions: When assessing the damage, the damaged fruits are classified into 4–5 classes.
- The risk of hail, fire and lightning strikes are covered.

### Example:

- The yield of apples is insured for the sum of 1,000,000 RSD/ha.
- Premium rates range from 8% to 12% of production value.



## 5. INDIVIDUAL INSURANCE: INSURING OF TREES / SEEDLINGS OF FRUIT TREES / VINES

- Insuring of young seedlings or plantation's crops are covered.
- Covered are a large number of risks: hail, fire, storm, accumulation of snow in the canopy.
- This insurance covers damage to trees / vines but not damage to fruits.
- The insurance policy lasts for one-year.
- Favorable insurance, premium rates are about 2–3%.

### Example:

- Apple seedlings are covered until they reach fruit bearing stage.
- The value of the seedling per piece is RSD 500.
- If there are 3,000 seedlings, the premium is around RSD 45,000.



## 6. INDIVIDUAL INSURANCE: DROUGHT

- The risk that is most often realized in Serbia (on average at 3.4 years).
- Specifics of drought insurance is conditioned in terms of participation in the damage and the method of determining the realization of risk.
- Data from meteorological stations on the amount of precipitation per decade per month are calculated.
- Due to risk of drought conditions, drought insurance has not been offered widely by companies in Serbia.
- Only one house insurer works with drought insurance: Generali Insurance company.

## 7. INDIVIDUAL INSURANCE: LOSS OF INCOME

Insuring crops from loss of income or "agricultural income". Insurance companies have the option to compensate for loss of income, although this type of insurance is still quite uncommon.

- An innovative type of insurance.
- Covers risks of weather disasters (hail) but also falling prices of agricultural products.
- Loss of income insurance has been realized in Serbia due to unclear conditions and the amount of the insurance premium.
- Only Generali Insurance company works with this insurance.





## BENEFITS FOR FARMERS BUYING AGRICULTURAL INSURANCE

In Serbia, agricultural insurance companies offer benefits and discounts based on seasonality or other factors, some of these benefits and discounts can count as:



- Payment of premiums in agro-periods 15.08.–15.11.
- Discount on payment of premiums in full.
- Discount given on contracted participation in damages—franchise (5%, 10%, 15%, 25% or 35%).
- Discount on insurance coverage for cooperation:
  - number of hectares per contractor (5%, 10%, or 20%) or
  - number of subcontractors of the contractor (10%, 20% or 30%).
- Professional and economic advice provided by insurance companies.
- State subsidies provided on insurance from 40 to 70%.

## METHODS FOR SUBSIDIZING AGRICULTURAL INSURANCE IN SERBIA

In Serbia, it is possible to apply for insurance subsidies, some points of which cover:

- The system of functioning of subsidies for insurance in agriculture is such that the insured pays the entire insurance premium to the insurer, after payment they receive a certificate of paid insurance premium which they submit to the Treasury (Ministry of Agriculture).
- After accepting the documentation, the Ministry pays the insured person a subsidy of 40% to 70% of the net premium they paid.
- The amount of the subsidy depends on the district in which the insured has a registered agricultural holding.
- Moravica, Zlatibor, Kolubara, Podunavlje and Sumadija districts have a subsidy of 70% while all others have 40–45% (most districts have 40%, only 45% have municipalities that have been declared underdeveloped).

### MAXIMUM SUBSIDY AMOUNTS

The maximum amounts of subsidies per registered agricultural holding are:

- Field crops— RSD 100,000
- Vegetables— RSD 500,000
- Fruit and viticulture—RSD 1 million
- Nursery and young plantations to harvest— RSD 500,000
- Livestock insurance— RSD 2 million
- **Total by agricultural household is possible a refund of up to a maximum of RSD 2.5 million for all types of insurance.**

## PRE-ASSESSMENT AND FINAL ASSESSMENT

- Pre-damage assessment is the initial stage in the damage assessment process.
- A descriptive definition of the strength of the hail and the damage to the crop is done.
- No damage percentages are defined yet.
- After the pre-assessment, comes the final assessment phase.
- It is carried out just before harvest.
- The damage percentages are finally defined.

## APPEAL ON ASSESSMENT

The farmer has a right to appeal of the assessment provided by the insurance company. The steps in this process:

- In writing within three days from the day the final assessment was made.
- A second-stage damage assessment is carried out—a new commission takes over.
- The insured is obliged to leave the control plots intact in their damaged condition.
- Expert examination of the crop within five days from the day of the assessment.

### FRANCHISE (PARTICIPATION IN DAMAGES)

The insured farmer participates in insurance coverage by the following levels:

95%	5%
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*Integral franchise-damage up to 5% is not characterized as damage but only damage over 5% is paid in full.*

90%	10%
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*Deductible franchise up 10% is paid by deduction for the amount of the franchise calculated by a percentage of the amount of damage of the total sum of insurance.*

### DAMAGE TO CROPS AND FRUITS

Procedure when reporting damage:

1. Submission for compensation (within 3 working days from the damaging event—phone or mail):
  - The application must be complete and sent by fax or e-mail.
  - It is necessary to enter the contact phone number, attached copy of the current account and identification card.
2. Damage assessment:
  - Pre-assessment
  - Final assessment

### THE PROCESS OF CONTRACTING AN INSURANCE POLICY

- STEP 1** Contact an insurance sales agent.
- STEP 2** Hold a meeting and get acquainted with the insurance conditions.
- STEP 3** Submission of data for the formation of a preliminary insurance offer: The crop to be insured, the area under cultivation, the cadastre of the land in which municipality the crop is located, the average expected yield per hectare, the average price per kilogram of product.
- STEP 4** If the insurance offer is accepted, it is necessary to submit the following information: a) personal data of the insurance policyholder (*name, surname, address, social security number, etc.*), b) exact parcel numbers and exact areas under the crop to be insured.
- STEP 5** Insurance starts at a specified hour/date/year and lasts until harvest.



# Livestock and Farm Animal Insurance

From dairy cows to chickens, livestock are significant cash investments, this why they need to be insured. Bad weather, accidents or intentional harm cannot be predicted, but having your livestock insured is the smart thing to do. For the most part, insurance companies will work with you to design an insurance policy that meets your basic requirements.

## WHAT IS LIVESTOCK AND FARM ANIMAL INSURANCE?

Livestock and farm animal insurance is coverage that protects your animals from the unexpected. Whether located on your farm or property, in the process of transport, your livestock is still your property. To remedy the loss due to the chance that something might happen to them, livestock insurance is a smart solution.

## WHICH TYPES OF LIVESTOCK CAN BE INSURED?

Surprisingly, a wide-variety and array of animals can be insured, counting as:

- Cows
  - Swine
  - Sheep and goats
  - Poultry
  - Fish
- Dogs
  - Bees
  - Pheasants in hunting reserves
  - Exotic livestock
  - Other

## ON WHICH BASIS CAN LIVESTOCK BE INSURED?

Livestock can be covered on basic risks and additional risks:

- Basic risks**

  - Death
  - Forced butchering because of illness or accident
- Additional risks**

  - Loss of calves or foals
  - Loss of reproductive capabilities
  - Among many others...

## RISKS

- Basic risks**

  - The risk of death covers the risks associated to an accident or natural causes.
  - Risk of forced slaughter or killing of an animal due to illness or accident. If an injury occurs that cannot be healed, the animal is sent to forced slaughter.
- Additional risks**

  - Loss of calves or foals at birth, where calves / foals are insured up to 24 hours after birth.
  - Loss of fertility leading to economic slaughter.
  - Decline in milk production due to the death of a dairy cow.

## EXAMPLE OF PAYMENT FOR DAMAGES

The process of claiming, verifying and payment in the case of a dead dairy cow:

- Simmental dairy cows are insured for the amount of insurance per animal up to 160,000 dinars. If there are 50 cows in a herd, then the total amount of insurance is 8,000,000 dinars.
- If in the example an insured cow died due to heart failure, a veterinarian from the insurance company is dispatched to the scene where they photograph and document the death.
- Upon verifying the death of the cow, the insured farmers is paid the full 160,000 dinars, the full amount of the insured cow.

Note: Livestock and animal insurance policies can be contracted with or without franchises, it is particularly important to know about this before concluding an insurance contract.

Dairy cattle insurance may seem expensive to a farmer, but in the long-term is a wise investment.

For every 10 cows in the course of one-year, there exists the risk of loss...



one cow or two cows can be lost

The premium for insuring 10 cows can amount to less than 50% the value of one cow.



In the end, the whole herd is protected!

## INNOVATIVE LIVESTOCK INSURANCE

Newly modified insurance conditions have recently been released for the livestock industry, most notably illustrated to the right is the case for dairy cows. As seen in the table, needs of insured dairy cows and the most associated risks are detailed. Dairy cows are one of the greatest insured livestock in Serbia.

Example: Pneumonia and blood clots of the lungs are not covered by basic insurance conditions, while in the new premium insurance packages it is covered (see table) in the amount of 85%.

## LEVEL COVERED EXPRESSED BY PERCENT OF CONTRACTED AMOUNT OF INSURANCE

Reproductive cows	TRIGLAV MAX PACKET – LEVEL 1		TRIGLAV MAX PACKET – LEVEL 1	
	Death Outcome	Forced Slaughter	Death Outcome	Forced Slaughter
Risks encompassed in narrow basic coverage, except for those specially listed in this table	100	65	100	65
Inflammation of extremities as a consequence of falls, slips or infections of wounds after injuries	100	65	100	65
Striking or running over by motor vehicles, drowning in water or mud, flood or effects of electricity, consequences of extreme non-normal temperatures	100	65	100	65
Suffocation because of external mechanical causes	70	45	70	45
Heart disease	100	65	100	65
Rupture of large blood vessels and consequences of bleeding, thrombosis of large blood vessels and consequences of heart attacks	100	80	100	85
Pneumonia and blood clots of the lungs	100	70	100	65
Invagination of intestines, strangulation of intestines, volvulus intestines	85	65	85	65
Presence of foreign objects in digestive tract	75	55	75	60
Bloating	50	35	70	50
Ketosis, dislocation of rennet, paresis, ruminal atony, rennet ulcer, paresis of the third stomach, overburdened rennet	50	35	75	50
Puerperal paresis and tetany	30	20	35	25
Perakuti and acute mastitis, triggered by bacteria of E-coli	45	0	50	0
Injury of the udder caused by mechanical action	35	30	40	30
Cesarean section, rupturing of the uterus at birth, bleeding following rupturing of the uterus, twisting of the uterus	100	80	100	80
Prolapse of the uterus, lagging of embryo, pelvic rupture at birth	90	70	90	70
Other illnesses of similar basic wide coverage	100	70	100	70
Loss of calf (24 hours after birth)	0	0	100	0
Drop in the production of milk	0	0	n/a	n/a

