Agricultural Insurance with State Support in Russia in the Conditions of Uncertainty and Risk

Lubov Konstantinovna Ulibina¹, Olga Alekseyevna Okorokova¹, Yuri Borisovich Turaev¹, Elvira Antsasovna Rusetskaya², Tatiana Vladimirovna Il'ina¹

¹Kuban State Agrarian University (Kuban SAU), 13, Kalinina street, Krasnodar, Russia, 350044.
²North Caucasus Federal University (NCFU), 1, Pushkina Street, Stavropol, Russia, 355009.

Abstract

The relevance of the topic of the research is determined by the necessity to implement insurance as a method to control agricultural risks in order to increase the financial stability of agricultural producers in the conditions of high uncertainty of natural and climatic conditions. Insurance as a means to stabilising risks in the agrarian sphere enables not only to compensate for the losses connected with the loss of agricultural products but also to protect the producers from possible bankruptcy, to enhance the predictability of financial outcomes of activities. The authors put the greater emphasis on the underlying factors influencing the formation and dynamics of crucial indicators of agricultural insurance with state support compared to Russian and foreign experience. The sectoral analysis of was carried out, the peculiarities of implementing instruments of agricultural insurance in terms of federal districts and insurance institutions were revealed, provisions on innovative programmes were developed in order to improve agreements between actors for strengthening agricultural producers’ activities.

Keywords: insurance, agriculture, agricultural insurance with state support, insurance market

1. Introduction

Agriculture is an important sector of the world economy and a source of the well-being of the population. Agriculture in Russia generates 4.5% of GDP on average. The development of agro-industrial complex stimulates the growth of the economy (in Russian the total amount of GDP has increased by 26% since 2012, at the same time the agricultural production has increased by 65%), provides food security and contributes to easing the social tensions. However, agricultural production undergoes risks connected with adverse natural phenomena. For instance, due to extreme droughts, 43 Russian Federation subjects were affected in 2010, whereas the damage of direct costs only exceeded 41 billion Russian roubles. In spite of the fact that there was record harvest of grain in 2017, state of emergency was declared in 21 Russian Federation subjects due to the negative influence of weather phenomena. One of the ways to stabilise risks in agrarian sphere includes insurance that enables agricultural producers not only to compensate for the losses connected with the loss of agricultural products but also to protect themselves from possible bankruptcy, to pay debt obligations, to increase the predictability of financial outcomes of activities. Therefore, insurance, which is an instrument of risk management, must become a part of a general programme of the development of the agrarian sector in Russia.

At the same time, the conducted research confirms the fact that the scope of insurance services on the Russian market of agricultural insurance is rather insignificant due to the limited offers as well as to the agricultural enterprises’ lack of sufficient financial resources to pay insurance premiums.

2. Methods

A complex of financial-economic and organizational-legal relations connected with the implementation of the system agricultural insurance with state support in Russia constitutes the subject under study. The methodological and informational basis of the article includes the works of leading scientists on the theory of state and municipal finances, normative legal acts regulating the process of financial provision of state services in the sphere of insurance, publications in periodical professional journals, statistical data, Internet sources, the material of the Ministry of Finance of the Russian Federation and other official information sources. The reliability of conclusions and recommendations is due to the complex use of general scientific methods such as dialectal means of cognition, system approach, methods of structural and functional analysis, principles of formal logic, presenting tabular materials and others.

3. Results and Discussion

Agriculture is an important branch of the world economy and a source of the well-being of the population. Agriculture in Russia generates 4.5% of GDP on average. The development of agro-industrial complex stimulates the growth of the economy (in Russian the total amount of GDP has increased by 26% since 2012, at the same time the agricultural production has increased by 65%), provides food security and contributes to easing the social tensions [1, 2, 3, 4].

Copyright © 2018 Authors. This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.
At the same time, agricultural production is exposed to risks linked with adverse natural phenomena. For instance, due to extreme droughts, 43 Russian Federation subjects were affected in 2010, whereas the damage of direct costs only exceeded 41 billion Russian roubles. In spite of the fact that there was record harvest of grain in 2017, state of emergency was declared in 21 Russian Federation subjects due to the negative influence of weather phenomena.

One of the ways to stabilise risks in agrarian sphere includes insurance that enables agricultural producers not only to compensate for the losses connected with the loss of agricultural products but also to protect themselves from possible bankruptcy, to pay debt obligations, to increase the predictability of financial outcomes of activities. Consequently, insurance, which is an instrument of risk management, must become a part of a general programme of the development of the agrarian sector in Russia [5, 6, 7, 8, 9, 10, 11].

Taking into account the importance of preserving stability in agriculture, the government provides subsidies for compensating part of expenses on paying insurance premiums on contracts of agricultural insurance that correspond to requirements established by law. Despite the support provided by the state, however, the expansion of agricultural insurance remains at a rather low level. The following problems that impede the further development of agricultural insurance with state support can be singled out:

- high insurance cost which is due to high probability of insurance event to occur and a significant amount of possible insurance compensation;
- the fixed character of key insurance conditions that does not allow considering the peculiarities of particular directions of agricultural business;
- the complexity of procedures while concluding, supporting an insurance contract, settling damages that are necessary for insurers to carry out;
- the insufficiently developed system of state subsidizing [4, 12, 13].

Agricultural insurance with state support is implemented in accordance with the Federal Law "On State Support in the Sphere of Agricultural Insurance and on Amending the Federal Law "On Developing Agriculture" No. 260 FL of 25.07.2011. According to the Federal Law No. 260, it is possible to single out the principles in accordance with which insurance activities are carried out.

1. The legislation envisages compensation amounting to 50% of the cost of insurance policy in case crops and livestock are insured under the terms determined by law.

2. Only those insurance organizations can act as insurers that are members of insurers’ union (the National Union of Insurers).

3. The conditions of insurance are determined by the rules developed by the National Union of Agricultural Insurers that are approved by the Ministry of Agriculture of the Russian Federation and the Central Bank of Russia.

4. Within the framework of state insurance, there are three main insurance directions: crops insurance, perennial plantations insurance and livestock insurance.

5. Crop loss is the decrease in its volumes by 20% or more in comparison with the plan. At the same time, the loss of perennial plantings is understood as the loss of their viability by more than 30% of planting areas.

6. The insurance sum is no less than 80% of insurance value of insured objects that is determined due to the average yield for the recent 5 years and due to average prices.

7. Deductible franchise up to 30% of the insurance amount is possible.

8. A plan of agricultural insurance which contains the upper limit of tariff rates for the calculation of the number of state subsidies is annually approved by the Ministry of Agriculture of the Russian Federation. Moreover, it should be noted that the share of the insurance premium for insurance and compensation payments cannot be less than 80%.

9. In case if a company is not capable of making an insurance payment, it is carried out by the union of insurers through the compensation funds, which is formed by means of contributions made by insurers amounting to not less than 5% of insurance premiums received by them.

However, it should be noted that the requirements established by the Federal Law No. 260 are strictly regulated and uniform for all groups of policyholders, facilities and insurance territories. Consequently, a closed list of events that affect insurance risks is legislatively established, the maximum value of the deductible franchise and the minimum amounts of the insurance sum are determined.

As a result, it is not possible to change the key terms of insurance. On the one hand, the insurance product is often too expensive for the insured or does not fully take into account the specifics of its activities; on the other hand, it is unprofitable for the insurer due to the increased risks and significant costs of conducting business which leads to a mutual refusal to participate in insurance.

The comparison of agricultural insurance with state support in Russia and abroad is presented in Table 1.

<table>
<thead>
<tr>
<th>Criterion</th>
<th>Russia</th>
<th>USA, Turkey, Spain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diversifying insurance programmes</td>
<td>Three programmes that are determined by law: crops insurance, perennial plantations insurance and livestock insurance</td>
<td>A number of programmes are not restricted by law. A flexible order of approving a programme within general conditions determined by law</td>
</tr>
<tr>
<td>Insurance risks and events affecting them</td>
<td>A closed list determined by law</td>
<td>A list is dependent on the programme</td>
</tr>
<tr>
<td>Specific conditions for particular insurance objects</td>
<td>Only with regard to two groups: crops that are grown in the sheltered ground and on mellowed lands; livestock in case their housing conditions include the mandatory use of electric and heat energy as well as water supplies</td>
<td>Depending on the specifics of the insurance object</td>
</tr>
</tbody>
</table>
Fig. 1. The total number of the Russian Federation subjects, the number of the Russian Federation subjects in which contracts of crops and perennial plantations insurance were concluded and subsidised and the number of the Russian Federation subjects that took part in the livestock insurance programme in 2012-2016 [14].

It should be noted that the number of concluded contracts, as well as contracts accepted for subsidies in the sphere of insurance of crops and perennial plantations in 2016 in 40 RF subjects, totaled 1 188 contracts including 1 027 contracts with agricultural organizations and 161 contracts with farming communities.

The total number of concluded and subsidised contracts of insurance of livestock with state support in 2016 in 47 RF subjects amounted to 320 contracts (Fig. 2).

Fig. 2. The number concluded and subsidised contracts in the sphere of spring crops and perennial plantations insurance and contracts in the sphere of winter crops insurance in 2016 [14].

The indicators of agricultural insurance with state support in Russia are presented in Table 2.

<table>
<thead>
<tr>
<th>Indicator</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Insurance coverage, %:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- of cultivated area</td>
<td>17.1</td>
<td>10.9</td>
<td>5.0</td>
</tr>
<tr>
<td>- of livestock</td>
<td>16.6</td>
<td>17.9</td>
<td>14.6</td>
</tr>
<tr>
<td>Budgetary subsidies (billion Russian roubles)</td>
<td>3.4</td>
<td>4.6</td>
<td>2.8</td>
</tr>
<tr>
<td>Insurance premiums (billion Russian roubles)</td>
<td>14.6</td>
<td>6.5</td>
<td>8.5</td>
</tr>
<tr>
<td>The share of subsidies in insurance premiums, %</td>
<td>37.0</td>
<td>70.8</td>
<td>32.9</td>
</tr>
<tr>
<td>Insurance payments (billion Russian roubles)</td>
<td>2.6</td>
<td>0.9</td>
<td>2.1</td>
</tr>
<tr>
<td>The level of insurance payments, %</td>
<td>17.8</td>
<td>13.8</td>
<td>24.7</td>
</tr>
<tr>
<td>The number of insurers that carry out:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- crops and perennial plantations insurance;</td>
<td>44</td>
<td>43</td>
<td>21</td>
</tr>
<tr>
<td>- livestock insurance</td>
<td>31</td>
<td>22</td>
<td>13</td>
</tr>
</tbody>
</table>

Since 2016 in Russia a unified system of subsidised agricultural insurance has been functioning within which insurance risks protection must be provided to agricultural enterprises according to uniform rules and standards. Due to the transition to general standards, the volume of the agro-insurance market increased in 2016 by 31%. According to the results of 2016, insurance premiums in the given segment totalled 9.8 billion Russian roubles (0.83% of aggregate insurance market premiums) including 8.5 billion Russian roubles (0.72% of aggregate insurance premiums) that cover agricultural insurance with state support.

However, in 2017 as a result of the changes in the subsidising system the regions distributed the funds of state support of crop production insurance for other purposes. In this regard 31 out of 48 subjects of the Russian Federation which accepted commitments in state support of crop production insurance could not fulfil them. At the same time, the insured cultivated area reduced from 4.1 to 1.9 million hectares in 2017. It should be noted that according to the
data of 2015-2016, the representatives of agrarian sphere insured annually 4.9 million hectares of cultivated area in the conditions of state support.

In 2016 the number of farms that received subsidies on the insurance contracts of crops and perennial plantings with state support totalled 913 including 774 contracts concluded with agricultural organisations and 139 peasant farms and individual entrepreneurs contracts; there is a decrease by 3750 contracts compared to 2013, the sharpest decline being in a number small forms of agricultural activity.

Fig. 3-9 present the dynamics of the agro-insurance market with state support in the Russian Federation.

**Fig. 4.** The dynamics of farms that received subsidies for the livestock insurance contracts in 2013–2016 [14].

**Fig. 5.** The share of insured in 2016 (million hectares) [14].
The cultivated area according to crops and perennial plantings insurance contracts amounted to 3.8 million hectares, at the same time the cultivated area of crops totalled 72.2 million hectares in 2016, only 5% being insured.

Spring crops were insured on the area of 2 439.5 thousand hectares which makes 63.9% of the insured area. Winter crops were insured on the area of 1 375.9 thousand hectares which makes 36.1% of the insured area and perennial plantings were insured on the area of 0.5 thousand hectares (0.01%).

4 046 thousand of heads of livestock were insured in 2016. The share of pigs in the general number of livestock is 53.2% with 2 152 heads insured, the share of poultry is 1 491 thousand of heads, the share of large livestock is 393 thousand of heads and the share of small livestock is 7 thousand of heads.

The following districts occupy a significant share in the field of crop production: Privolzhsky Federal District – 25.4% and Central Federal District 22.0%. Southern Federal District constitutes 20% with 237 insurance contracts.

The share of agricultural insurance in Southern Federal District is 9.2% with 26 insurance contracts. According to the results of 2017 insurance premiums in the segment of agricultural insurance amounted to 3.9 billion Russian roubles (0.3% of aggregate insurance premiums on the market) including 2.4 billion Russian roubles that cover insurance with state support (0.2% of aggregate insurance premiums) (Table 3) [13, 16, 17].
Fig. 8. The share of federal districts in the portfolio of concluded and subsidised contracts of agricultural insurance with state support in the field of crop production in 2016 [14, 15].

Fig. 9. The share of federal districts in the portfolio of concluded and subsidised contracts of agricultural insurance with state support in the field of livestock production in 2016 [14, 15, 16].

Table 3. The study of the number of insurance premiums in the segment of agricultural insurance.

<table>
<thead>
<tr>
<th>Indicator</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
<th>Rate of increase, %</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Billion Russian roubles</td>
<td>%</td>
<td>Billion Russian roubles</td>
<td>%</td>
</tr>
<tr>
<td>Total volume of voluntary and mandatory insurance</td>
<td>1 023.8</td>
<td>100.0</td>
<td>1 180.6</td>
<td>100.0</td>
</tr>
<tr>
<td>Agricultural insurance</td>
<td>7.9</td>
<td>0.8</td>
<td>9.8</td>
<td>0.8</td>
</tr>
<tr>
<td>Including insurance carried out with state support</td>
<td>6.5</td>
<td>0.6</td>
<td>8.5</td>
<td>0.7</td>
</tr>
</tbody>
</table>

According to the results of the study, it was found out that the volume of received subsidies decreased by 3 times in 2017, mainly due to the cease of state support for crops risk insurance. As a result, in 2017, agricultural enterprises were able to conclude 581 insurance contracts on the terms of state support, at the same time 1954 contracts were concluded in 2016.

Reduction of state support had the greatest impact on the crops insurance market. In 2016 insurance premiums amounted to 7.5 billion Russian roubles while in 2017 the market decreased to 1.8 billion roubles. In livestock insurance, the calculated premium indicators differ insignificantly and are at the level of about 1 billion Russian roubles in 2016 and 2017.
Consequently, there was a sharp contraction in the volume of the market of subsidised insurance of agricultural risks by 71.8% in 2017 which led to a reduction in the country's agricultural insurance market as a whole. Its volume decreased by 60.2%.

Taking into account the current situation there is no mass substitution of contracts for subsidised insurance with contracts concluded without state support. The number of contracts of crops and livestock insurance concluded independently in the majority of the regions did not increase. Part of the insurers who have lost access to state support increased their insurance protection in accordance with their policies, however, such a way out was not available to everyone. Moreover, it should be noted that in 2017 there was a record harvest in the last three years and most of the agrarians ceased to consider the risks of its loss to be significant.

As can be seen, almost throughout the entire investigated period of 2013-2017 there has been a tendency to reduce the number of agricultural insurance contracts including insurance contracts on the terms of state support.

According to the data of the National Union of Agricultural Insurers, the insurance of agricultural risks on the terms of state support is presently the prerogative of major and medium-sized farms. The average value of insurance amounted to 1.1 thousand Russian rubles per 1 hectare in 2017, whereas the average insurance premium per 1 contract was 3.2 billion Russian rubles. Taking into account subsidising the expenses of agrarians were generally reduced to 550 Russian rubles per 1 hectare.

It is obvious that without subsidizing the payment for agricultural insurance risks becomes less available. That is exactly why the systems of state support of insurance protection are active in the majority of the world countries. In case of emergencies, the destabilising of agricultural production can seriously weaken the competitiveness of this sector of the economy for several years.

4. Conclusion

The conducted research confirms the fact that a new order of agro-industrial complex insurance that does not take into account the specifics of the agro-insurance system became the reason of dramatic changes on the market of insurance of agricultural risks.

In order to improve the conditions of agricultural insurance and to attract agricultural producers into the given sphere, the following methods are possible to be used.

1. Reducing the minimum yield losses established in the legislation which will allow agrarians to insure crops at any level of losses.
2. Introducing flexible agricultural insurance programmes and the possibility of state support for regions with high-risk agriculture.

As it was noted above, the insurance of agricultural risks on the terms of state support is presently the prerogative of major and medium-sized farms. It seems advisable to promote the insurance instruments for small forms of agricultural activity which may include such types as mutual insurance, index insurance, special insurance programmes developed with the help of subjects of the Russian Federation.

Presently the main objective, as we see it, is the improvement of the system of agricultural insurance subsidising. There are several options to solve the given problem. The first one includes removal of agricultural insurance from a single subsidy. However, in this case, the fundamental changes must be introduced to the subsidy system. There is also a compromise solution: to give agricultural insurance a protected status without introducing radical changes to the general system of subsidising the agro-industrial complex.

It is worth mentioning that a number of regions are already implementing similar changes. Rostov oblast can serve as an example. The local authorities introduced a special coefficient that reflects the involvement of insurance and insurance coverage. The amounts of per-hectare support provided to agrarians are determined according to whether they have an insurance policy or not (such financing is determined only on the basis of declared cultivated area and is not dependent on the outcomes of agricultural production). The fact that the National Union of Agricultural Insurers has succeeded in implementing "target programmes" cannot be ignored since the legislator has secured the opportunity for the Union to direct part of the compensation income received from the placement of the investment income funds to agricultural insurance development programmes.
There are five programmes aimed at the further development of the agricultural insurance system in Russia. They were developed by the National Union of Agricultural Insurers and approved by the Central Bank of Russia, the Ministry of Finance and the Ministry of Agriculture of the Russian Federation. Two of these are insurance ones: "Risk Zoning of the Territory of the Russian Federation" and "Developing Supplementary Insurance Programmes". The given programmes manifest an idea of diversifying supply for customers and introducing new insurance products to the market which could take into account the needs and financial opportunities of agrarians in different regions as well as actual risks in these regions.

The programme "United Information System of Agricultural Insurance with State Support" is aimed at eliminating gaps in informing as well as in statistical recording in agricultural insurance. The programme "Increasing financial literacy of Agrarians" aims at promoting insurance with state support, and the programme "United Information System of Agricultural Insurance with State Support" is aimed at eliminating gaps in informing as well as in statistical recording in agricultural insurance.

In spite the fact that the National Union of Agricultural Insurers jointly with Geosys has been implementing a project on space monitoring which allows monitoring and analysing on an ongoing basis the state of agricultural crops. As to the development of agricultural insurance in 2018, the National Union of Agricultural Insurers is planning to promote products and agricultural insurance programmes without state support.

Another achievement of 2017 is the expansion of the space monitoring system. Since 2016 the National Union of Agricultural Insurers jointly with Geosys has been implementing a project on space monitoring which allows monitoring and analysing on an ongoing basis the state of agricultural crops.

As to the development of agricultural insurance in 2018, the National Union of Agricultural Insurers is planning to promote products and agricultural insurance programmes without state support. In spite the fact that the National Union of Agricultural Insurers aims at promoting insurance with state support, it is also interested in creating and supplying inexpensive products on the market for farmers and small peasants that cannot, in fact, protect themselves even from part of risks.

Insurance products that can be convenient and simple in service for insurers and financially available for agrarians are necessary. Insurers can make such offers to agrarians in the regions that lack the resources for state support or where there are not enough of them. The legislation changes that presently are under consideration already contain measures in this direction of state support; however, in the insurance segment without state support they are no less important.

References