Insertion opportunities of agricultural insurance in the Republic of Armenia

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ABSTRACT
The territory of Republic of Armenia is considered as a high-risk zone of agricultural production. According to approximate calculations, damage to agriculture as a result of natural disasters in various years reaches 15-20 billion AMD (410 AMD=1$ USA), while in most disastrous year it also exceeds. Given these circumstances, we come to the conclusion that the agricultural sector is needed to establish on effective system of insurance, in addition to the process of insurance provided by the state’s direct participation in the process of implementation of agricultural insurance. In our opinion, the agricultural insurance will significantly contribute to the guaranteed production of the agricultural products, will reduce agricultural losses, will minimize the degree of risks, which will stimulate the development of this sector.

Introduction
The territory of Republic of Armenia is considered as a high-risk zone of agricultural production. Periodically repeating natural disasters (freezing, hail harmed, winds, drought, etc.) each year, according to various estimates, destroys 15-20% of agricultural output [4].

Agricultural farms which suffered disasters cause as a result of incurred losses are losing costs of recovery on their production, and therefore opportunity to create the necessary financial resources for the next stage of production too. At the same time the resources allocated for the damage compensation from the government’s reserve fund are limited, and in fact, the government compensates only a small part of losses. So, in our opinion, the only alternative is the organization of agricultural crops insurance, which has strategic importance for the country’s agriculture. It is important for both economic and social sense.

Purpose and objectives
According to the existing legislation, currently in the field of agriculture, insurance should be carried out on a voluntary principle [1]. However, economic entities generally refuse from insurance, which is due to their low payment, either distrust towards the insurance institute. Along with it, associated with the high risk, the functioning insurance companies are not striving to carry the insurance in the agricultural sector. According to approximate calculations, damage to agriculture as a result of natural disasters in various years reaches 15-20 billion AMD (410 AMD=1$ USA), while in most disastrous year it also exceeds [4].

Analysis
Given these circumstances, we come to the conclusion that the agricultural sector is needed to establish on effective system of insurance, in addition to the process of insurance provided by the insurance legislation of both sides (insurers and the insured) [3] to a third side – the state's direct participation in the process of insertion of agricultural insurance. In favor of this argument speaks the international experience in the agricultural insurance. In favor of this argument speaks the international experience in the agriculture insurance. In all the countries which have achieved great success in agricultural insurance sector is existing the state participation, which is expressed in the insurance programs working, reinsurance and the provision of the additional state guarantees, subsidies of insurance premiums, etc.[2].

The legislation regulating the insurance sphere of Armenia, as already mentioned, is in the phase of the reform for the tendency to approach it to international standards of insurance control and regulation. However, the low doesn't contain separate provisions relating to insurance relations in the agricultural sector, connected with:
- voluntary and compulsory insurance for application in agriculture, such as in Japan, where for some of crops implemented the compulsory crop insurance,
- the body, who will regulating and organizing the agricultural insurance process, will coordinate the work of team, will has developed insurance plans, such as ENESA in Spain, or FCIS and RMA in the USA,
- reinsurance risks, arising in sphere (Spain, USA, Canada, etc.).

Among the rural population is lack the insurance culture. It is connected with the peculiarities of the insurance system of the USSR. That’s why in some agricultural farms still dominate the view that the state is obligated to compensate the damage of their activities by natural disasters, and they are not prepared to allocate additional funds for insurance purposes.

There are missing the mechanisms characteristic to risks’ evaluation in agriculture. There are no business databases associated with crop's major risks. Does not work the institute of actuaries in Republic of Armenia, there are no appropriate professionals for the calculation of the insurance risks. There doesn't also operating the institute of damage assessors. There Are not operating tax and credit promotion, state guaranteeing and subsidizing mechanisms, that would allow private insurance companies and agricultural farms involved in the insurance process, because it has a fairly low level of profitability, and in many cases turnaround is damaging.

Conclusions and suggestions
In the study results we came to the conclusion that the main factors hindering the agricultural insurance system Republic of Armenia are:

Keywords
Agriculture, Insurance, Risks, Losses, Insurance premiums.
- the absence of an appropriate legislative framework,
- the absence of an appropriate professionals in insurance companies,
- the absence of scientifically grounded assessment system for agricultural risks,
- the shortage of relevant information in agricultural households,
- the low solvency of agricultural households for paying the insurance premiums completely,
- the absence of experience of operating companies toward agricultural sector in Armenia,
- the absence of reinsurance companies associated with small scale of the domestic insurance market.

For the introduction of agricultural insurance in Republic of Armenia is necessary long-term state plan, which should be based on the international advanced experience, taking into account specifics of our country compulsory. That’s why we developed the model, suggesting to enforce the approaches that committed and implemented by number of studied countries, that we believe will be most effective, we assess their compatibility with our country terms and conditions.

In the initial stage, it is necessary to carry out risks assessments-specific agricultural sphere, which should participate as the Central bank, as the insurance regulatory and supervisory authority defined by the law, both the government represented by the Ministry of Agriculture and Ministry of Finance.

Initially, the program can be implemented only in some regions, for some crops and risks. In this stage at the expense of the state budget should be done insurance premiums subsidizing. Initially should be subsidized 50% of the insurance premiums, then, depending on as the level of success process of the program, both solvency and enrollment of the agricultural producers, it can be modified.

A key place occupies the program’s coordinator body, which shall be governed by all stakeholders, which provides the maximum transparency of process and creation of the trust between the all parties towards it. The similar model of the coordinator body is used in Spain. Governing body total should be involved all stakeholders, representatives of the state departments as the Ministry of Agriculture as the body in dealing with the agricultural development in Republic of Armenia; the Ministry of Finance, which will be perform financing of the program and the Central bank of Armenia, as the regulatory and supervisory body of the insurance field. In Governing body with the right to consultative vote may participate also representatives of the insurance sector in the face of the Association of insurers and representatives of agricultural farms. The program’s main function is to coordinate the development of strategic plans, as well as elaboration of the insurance annual plans.

After the develop of the annual insurance plan, before the start of the insurance year this plan provided to insurance companies and the organizations which uniting the agricultural farms.

The next function that should be performed by the program coordinator, is the subsidy of the insurance premiums. It may be provided to insurance companies in exchange for their signed contracts.

As an alternative is scheduled creation of insurance Pool for the agricultural insurance by the insurance companies. This version has its successful version in Spain. It has the following advantages:

- provides a unified approach by insurance companies and guarantee the realization of benefits. This problem is very important, if we take into account the limited financial capacity of local insurance companies.
- Makes the connection with the program coordinator easy, as a body stands for on behalf of the insurance sector.
- Increase the consumer’s trust, as instead of many companies compensations performed through the concentrated body (insurance pool).
- Affords an opportunity to implement unified control toward the agricultural farms, in purpose to disclose unscrupulous producers, which in other circumstances would have been required to realized the cooperation of the individual companies, which are not able to succeed.

It is planned to involve local government bodies in insurance process for the purpose of insurance premiums subsidizing. Currently, related to limited budget capacity of local governments, its chances are small, but over time it is possible a portion of the financing remove from the state budget to the local budgets. This option successfully used in Canada, where the subsidizing of insurance premiums is implemented equally by the federal and local governments.

Reinsurance problems occupy a key role. Here are offered two options – reinsurance by local or foreign companies. The first option is possible only through the creation of an unified state reinsurance company, because the insurance market in Republic of Armenia is extremely small, and the creation of private reinsurance companies in the near future is unlikely. For this reason, as the most preferred option, at the initial stage is scheduled the reinsurance of risks in foreign reinsurance companies. Despite this, must be taken measures for creating the local state reinsurance fund in the future.

Analyze the potential financial expenses and their distribution between the involved parties, which are classified to the expenses, making by the state and the agricultural farms. The expenses making by the state funds are the followings:

- insurance premiums subsidies (on average 50% of the total premium amount),
- the managerial costs related with the risk assessment and project management,
- the compensation of managerial expenses of companies’ service and contracting.

The expenses performed by the agricultural farms are the part of the insurance premiums that should bear the agricultural farms, which conventionally, in our model will take 50% of the total insurance premiums.

Insurance coverage usually not exceed the cost of insurance or 70-80% of so-called average yield rate.

The real expenses for the insurance premiums is calculate by the following formula:

\[ P_K = \frac{R \cdot (100 - S) \cdot C}{100 \cdot L} \]

Where:

- \( P_K \) – percentage of the real expenses of agricultural farms,
- \( P \) – percentage of the insurance tariff
- \( S \) – percentage of the amount of subsidy
- \( C \) – percentage of the insurance coverage
- \( L \) – percentage of the money’s index.

So, the formula shows that the rate of the real expenses of the agricultural farms by the insurance premiums has directly proportional depend on the insurance tariffs and insurance coverage, and inversely proportional to the size of insurance premium subsidy.

Related to low solvency of agricultural farms, which interferes with the process of collecting insurance premiums, we
consider it appropriate to carry out the insurance of the agricultural crops in several stages. In the first stage implement the insurance services in any particular, separately taken region, direction of particular crops and for specific insurance risks. Apply the insurance coverage towards the total amount of insurance (total value of crop) by 80%. Accept subsidy rate by 50%. Insurance premiums subject to payment by insured’s charge with the following schedule: 50% of calculated overall premiums charge when the insurance contract is signing, and the other 50% after the harvesting. If will need to pay the insurance compensation to the given insured, so then will be reduced not paid insurance premiums of the total amount by the offset.

In our opinion, the agricultural insurance will significantly contribute to the guaranteed production of the agricultural products, will reduce agricultural losses, will minimize the degree of risks, which will stimulate the development of this sector.

References