

## **PREDISPOSITION TO RISK FARMING**

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### **Abstract**

*Perception of risk and its intensity of manifestation require knowledge of "environment" in which agriculture operates.*

*Knowledge is the fundament of the information about the importance and peculiarities of agriculture.*

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### **Introduction**

Romanian agriculture, still in the process of restructuring and laying on the principles of European integration has, and in these circumstances, an important contribution to the formation of macroeconomic indicators (PIB, VAB) and insurance products for the population.

Agriculture is conditioned more than other national economic sectors by the strong manifestation of some factors the most unpredictable and less controlled that can put their mark over the results of the production and economy.

Studying the risk can be advanced and includes analysis of forecasting combined with research in management, agriculture, economic mathematics, statistics, operational research, giving him an interdisciplinary character.

Application of agricultural science and the theory of risk in agricultural production may lead to prevent damage, the effect of increasing economic performance.

### **1. Risk – conceptual approach**

Risk in an uncertain event or process and likely to cause a loss, a loss in activity, operation or economic action [1]. The notion of risk is inseparably linked to the profitability and flexibility. Risk of undertaking economic activities expressed inability to adapt to time and lowest cost to changes in economic and social environment and economic outturn reflects variability depending on operating conditions [3]. Uncertainty about economic performance is driven by the fact that no revenue or costs are causing them safe.

Currently, there is a dysfunction between achievements in the field of models and methods of risk analysis and the ability to control balance and opportunities to deal with the risk [2].

The start of any action, lack of performance conditions generates uncertainty, and its decision under the rule is automatically assuming the risk. The difference between these two lies in several key features:

<i>Uncertainty</i>	<i>Risk</i>
<ul style="list-style-type: none"> <li>• complex and unpredictable conditions and circumstances identified as time of occurrence; when they are identified or predicted are unstable, so their probability is 0;</li> <li>• doubt that it creates an occurrence due to the low number of certain knowledge or the lack thereof;</li> <li>• they exist when various effects are possible, but where probabilistic information are incomplete or not exist at all.</li> </ul>	<ul style="list-style-type: none"> <li>• they determine the evolution of some economic phenomenon, the influence factors and their possible effects with a mathematical probability greater than 0 and less than 1;</li> <li>• expresses that an action to generate losses, their size is assessed using probability;</li> <li>• represents a situation where cash flow value is facing a probable distribution</li> </ul>

## 2. Features and functions of agriculture to influence risk

Globally, according to UN statistics, it is estimated that, of the 141 countries analyzed in 61 States agriculture produces over 20% of gross domestic product in about a quarter of agricultural states it is over one third of domestic product gross and a number of 18 countries agriculture is the main branch of the national economy recovered and the largest share in gross domestic product. Thus, more intense focus on agricultural development is not a matter of conjecture, but a political problem of the utmost importance and steady persistence.

An agricultural policy unclear and insufficient results in trade protection, import or through various financial instruments to support farmers, including through subsidies, leading to lack of materials and raw materials necessary to conduct normal production processes (diesel parts exchange, chemical fertilizers), thus creating a state of uncertainty and hence lead to a risk of production for farmers.

To stimulate rural development are necessary administrative and institutional reforms based on education, cooperation and participation of sectors of the economy, both in food production and that of production inputs for agricultural development.

Identifying peculiarities have impact on agriculture production and profitability of products and their knowledge is an advantage to farmers to protect their business risks that may be exposed.

- Major risks, determining the farms are caused by natural factors (weather, producing floods, droughts etc.) and biological (cyclic nature of production, manifested by the volatility and seasonality of production and farmers' income).

Actions of natural factors put their mark on the level of economic and financial results. Thus, crop yield is influenced by changes in climate, soil quality, the profitability of each crop, applied technology and management type.

- Activities taking place into the natural environment, agriculture and a number of restrictions imposed on the environment. Solution to this problem is reflected in the variety of activities in the Romanian agriculture and practicable means of production privilege management structure. High complementarity between agricultural products and the need to avoid land degradation, in general the landscape, by combining measures and merge branches (crop production with animal production, agricultural production processing, agro tourism development and rural tourism, handicraft activities etc.). farming is a feature role on reducing economic risks (increased income, farm performance) and rural development.

- High prices of inputs (seeds, fertilizers, tractors, agricultural machinery) production entails risks due to lack of technology application (family holdings) or inappropriate their application (in some farms with commercial character). To these is added risk of product quality.

- Higher costs to transport an impact on production by increasing the unit cost of product, which leads to economic risks (price risk).

- Supply and demand of agricultural products from other products, have difficulty (relatively stable demand and less elastic offer changeable variable and difficult long-term [4]). In the short term, supply is oscillating depending on climatic factors with influence on the annual yield per hectare. Also, demand and elasticity are influenced by prices of agricultural products and consumer incomes, with long-term growth trend. Short and medium term, costs related to industrial processing and marketing make the difference between prices and consumed at the "farm gate" to be greater. Thus, there are negative consequences for the offer and, in general, the efficiency of agriculture in relation to other traders (mainly with trade in agricultural products).

- Fluctuations in prices create disadvantages in integrating agriculture economy. Their reduction requires policies regulating the market, it also achieved in all world states because of the interest to the public for its stability and health.

Agriculture is different from other branches of the economy and the functions they perform: food function, socio-economic position to participate in the growth and function of environmental protection and sustainable development [4]. Hence, the reduction or lack of essential agricultural products may cause risks vital life by producing disturbances in the body. It may also be conditional on rural development, having significant role in highlighting the local natural resources, the

launching of small and medium business by generating additional income and employment.

Agriculture, being the inter-relationship with the natural environment, is generating risks (inappropriate use of chemicals, soil compaction, air pollution and livestock manure lead to serious risks of environmental degradation). But, using resources rationally, agriculture work on maintaining ecological balance, thus ensuring environmental protection.

### **Conclusion**

- The issue of natural disasters presents serious problem for both farmers and consumers (reducing supply and therefore price increases for agricultural product concerned) and also for the national economy.

- Mitigation of effects of risk and could get as a result of scientific contribution in agriculture.

- Application performance management to the risk in agriculture is vital because the effects of the risk, once produced, can not be eliminated, resulting in significant production and economic losses, which may be present for long periods or very long.

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