RESEARCH ON MONITORING RISK FACTORS THAT DETERMINE VULNERABILITY OF SUSTAINABLE DEVELOPMENT

CERCETĂRI CU PRIVIRE LA MONITORIZAREA FACTORILOR DE RISC CARE DETERMINA VULNERABILITATEA DEZVOLTĂRII DURABILE

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Abstract: *In this study we intend to analyze the risk factors that determine the vulnerability of a sustainable economic support in Romanian countryside. Given the particularities facing the entire system, we began this research by identification and characterization of these factors. The conclusions allow us to make proposals that can limit the impact they have on the agricultural environment in our country. To reach that goal, the methods used consisted in analyzing and processing information about the risk factors. Then they have been grouped, depending on the influence they have on items in the agricultural system. Thus, the factors have been located at the agriculture, economic-social, ecological and entrepreneurship level.*

Key words: sustainable development, risk factors, agriculture

INTRODUCTION

In order to treat the topic, it must first be clarified a number of concepts. Thus, the purpose of this work, monitoring we mean the identification, analysis and evaluation of risk factors. Speaking about the vulnerability of agricultural environmental sustainability, we understand that development, achieving performance parameters, productivity in rural areas, training and calibration of employment in the long term, supported by a substantial amount of investment in infrastructure and production technologies will be conditioned on the parameters that could be risk factors. Among these, we mention: the volume of production and

investment, the number of agricultural machinery, employment structure, unemployment, average number of employees, foreign trade.

We define risk factors as elements that threaten the sustainability of an economic system, making it vulnerable. Vulnerability is a complex phenomenon that finds its subsequent effects on various development plans. In this sense, we tried to identify a number of risk factors affecting the agricultural system, risk factors socio-economic risk factors that affect the ecological aspect of sustainable development of rural space and risk factors for the impact on entrepreneurial side.

Thus, at the farming system level, the factors were taken into account were: the level of investment in agriculture, the most important investments being made with foreign capital, with an average annual growth rate of 60%, this being done in the majority private sector, with an average annual growth rate of 50% (INSS, 2010). Crop production yields showed a fairly large fluctuation most likely influenced by environmental conditions, this running through an average annual growth rate of 5% for vegetables, and an average annual rate of decline of 3.29 grain. Pesticides used is another factor that could pose problems. This was recorded, according INSSE, 2009, a growth rate of 1.57 per year (especially nitrogenous fertilizers), and a negative annual rate of 6.71, the manure (INSS, 2010). Population migration to and from rural areas was characterized by the following figures: in 2008 (Statistical Yearbook of Romania 2009, Bucharest 2010), there were more women who have left the country, meanwhile many men have entered our country. Furthermore, in all regions of the country have been founded that men who come into the country, were more than women who have left. Moreover, it was considered that the area south of the country, the number who came to the country is higher than those who were out, but overall with fewer women, so they can be considered risk areas. For animal agriculture, it is aimed farms had animals or produced. In this respect, we noticed (Statistical Yearbook of Romania 2009, Bucharest 2010), the fact that in recent years (2006-2008), the farms which have between 5-10 ha and 10-50 ha, recorded the largest increase.

In terms of ecological indicators, we consider the parameters of air and soil pollution, inappropriate technologies, or are not properly sized or morally outdated. Talking here about the amounts and types of fertilizers used disproportionately fuel consumption, and changing cultural structures. At the same time, we appreciate that it seeks a greater adaptation of cultural

practices to global warming, the choice of genetic material, new methods of fertilization and irrigation, by moving production areas by introducing new crops, also , changing rainfall and more frequent occurrence of extreme events, has already complex economic implications. These implications are reflected today in special efforts to network with partners involved, especially the adaptation of banks for credit or insurance agencies taking major risks occurring after extreme weather.

To identify risk factors for socio-economic impact on rural areas in Romania, we consider the affected populations (average age population with large, low education level, and often feminized). Here we have to remember that until 2008 (according to INSSE, 2010), which has seen the population increase was the largest in the range "40-44 years" (with an average annual growth rate of 10 12%), followed by category "85 years plus (with an average growth rate of 4.47%). Decreases were recorded in the category of the population 15 to 19 years (-3.75%), followed by 45-49 years (2.78%). We mention further that the markets in these areas could be affected primarily dysfunctional mechanisms of information and professional collaboration between central and local structures, which is already recorded (Badea I. 2009). Occupational migration, must necessarily taken into account because this will create imbalance in the local community level. According to data provided by INSSE, in 2008, there was a preponderance of female migration, meaning from urban to rural, and that in the age group of 25-35 years. Here we mention also the work force with partial occupancy, which occurred as a result of the small size of farms and areas with high percentage of the population employed in agriculture, make the area occupied by the unit of labor to be very small. Also at the population level are taken into account data on age, gender and professional employment (ILO, 2010).

Secondly, everything regarding the social heritage, it will have new meanings if interpreted in terms of globalization, delocalization of large companies, and outsourcing of corporate social responsibility.

Perceived through the prism of social interaction and economic environment, the risk factors identified at entrepreneurial opportunities are likely to approach new values of modern integrated management system, social partnerships between different actors, addressing alternative or complementary methods and management techniques (R. Guesnerie, 2008). In this sense, entrepreneurial education policies, to encourage business

development competitive entrepreneurial environment, will contribute to the development of training scenarios and a set of indicators of vision with a positive impact on investors, the employees, their employees, but and the local sustainable development. Professional training, the decision to produce or invest, the preparation and selection of industry visibility, credit problems, education on the various risks, are all issues that affect the business environment in Romania.

MATERIALS AND METHODS

Topics covered in this paper finds its justification in the complex development of the agricultural system, various approaches to its recovery, but volatility and institutional environment in Romania. Identifying risk factors affecting the vulnerability of sustainable development requires the integration of new concepts, modern, innovative, such as social responsibility, consult the social partners, entrepreneurship, etc., and their approach was made in four ways: agricultural, socio-economic, environmental and entrepreneurial. This approach aimed to develop a set of monitoring indicators which to shape a response to the agricultural environment in order to support sustainable development.

The methods used in the present work consisted in gathering, analyzing, processing, evaluation of data on risk factors identified, and then interpreting the results and conclusions. For a better understanding of have called for a process to estimate the areas of risk, risk populations, but also the degree of local agricultural market integration and convergence of factors of production (by computing the correlation coefficients, Badea I. , 2009). Also, to set forth some of the variables for which we have had access to data, we calculated the average rate of growth.

Then, present the results of this work, we want to define criteria in order to identify and assess major risks associated with and the effects they might have on the rural environment by designing a platform for integrated assessment of agricultural environmental safety.

RESULTS AND DISCUTIONS

The resulting data analysis and interpretation of major differences between developing regions of Romania, in terms of yields obtained and

technologies used (areas west and north west as having production and higher yields). It has seen the light and different production structures, labor force structure, acquisition of inputs, capital, land, labor, number of animals (Badea I.,2009), thus rebalancing the necessary structural measures and technology to in order to get a economic and rural sustainability.

At the same time, talks about the tendency to reduce the land used to feed people at the expense of crops for biofuel, have sparked a controversy at the international level (A. Giddens, 2009). The assessment of the economic integration of environmental principles, to practice sustainable management and to develop coherent policies, it has to be found alternative management system optimization and improvement of cultivation technologies that can ensure a sustainable countryside. Thus, after data processing and analysis results can be proposed structural rebalancing measures and technology to an economic, social and rural sustenability.

As a solution to these problems requires diversification of activities, development of services in rural areas, here could observing the technological differences, different investment levels, labor force with inhomogeneous characteristics (like education, age, gender, mobility), specializing in cultural areas, the number of animals, machinery and tractors equipment.

CONCLUSIONS

The conclusions have allowed the identification of general trends in support of sustainable development by identifying the variables studied, and a proposal for rural sustainable development indicators, identified in the paper analyzed the risk factors by adapting to new requirements of society and the requirements of modern economy environmental protection. Developing competitive environment by encouraging private entrepreneurial initiative, by accentuated integrating local markets, markets and risk management functionality to support the market, were also findings that have emerged after the study.

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