OPINION

АГРАРЕН УНИЗЕРСИТЕТ кр. Пловдив BX NO HOPGARAD NE Получено на 19,01 20 21

on a dissertation for obtaining the educational and scientific degree "**Doctor**" in field of higher education **3**. Social, economic and legal sciences, professional field **3.8**. Economics, scientific specialty: Economics and management (agriculture)

<u>Author of the dissertation:</u> *MIRKO MILAN MILANOVICH,* PhD student in part-time form at the Department of Economics at the Agricultural University, Plovdiv

<u>Topic of the dissertation:</u> "MANAGEMENT OF INNOVATIONS IN THE AGRICULTURAL HOLDINGS IN THE REPUBLIC OF SERBIA"

Reviewer: Assoc. Prof. VALENTINA LYUBENOVA NIKOLOVA-ALEXIEVA, PhD University of Food Technologies-Plovdiv, field of higher education: **3**. Social, economic and legal sciences, professional field: **3.8** Economics, scientific specialty: "Economics and Management", appointed as a member of the scientific jury with order № RD-16-1078/25.11.2020 by the Rector of Agricultural University.

1. Relevance of the problem.

The relevance of the dissertation research is determined by the importance of innovation management as an essential part of the management of any organization in the agricultural sector. The innovation activity of agro-enterprises is closely related to their competitiveness and the formation of innovation strategies in line with global development trends and market requirements. Modern paradigms put innovation on a pedestal - they are "the most direct path to sustainable development" or "the main source of profit", as they are essential for: reducing costs, improving the quality of goods / services, creating added value for the consumer, raising the image of the enterprise, conquering new markets and others.

Identifying alternatives for improving innovation management is a search for a way to achieve sustainable agribusiness development in Serbia, and hence to effective economic development. This creates a growing need for research in the field of innovation management and the implementation of good practices, in order to improve the quality and innovation activity of the agricultural sector in Serbia.

In this context, I believe that the chosen topic of the dissertation and the results of the research are relevant and significant, both for students and teachers and for the general public.

2. Purpose, tasks, hypotheses and research methods.

The topicality and significance of the researched issues are successfully argued in the introduction of the dissertation. The main research hypothesis is formulated, which is proved in the course of the research by verifying four auxiliary hypotheses. It is necessary to define more correctly the goal and the 5 work tasks related to its achievement, as well as the subject and object of development.

The chosen methodology and research tools correspond to the complex, multidimensional nature of the research. The theoretical part uses quantitative and qualitative analysis, descriptive and comparative analysis, synthesis techniques. The empirical part uses mathematical and statistical methods such as factor and discriminant analysis, correlation and regression analysis. The use of quantitative and qualitative methods, sample surveys and in-depth interviews makes an excellent impression.

In interpreting the data, the doctoral student is based on data from the OECD, research reports of the Ministry of Agriculture in Serbia, reports and bulletins of the Statistical Institute in Serbia, as well as a number of regulations. The survey is based on e-mailed questionnaires to up to 60 innovation experts and 121 agricultural holdings. Data processing is performed using the statistical software SPSS.

3. Visualization and presentation of the obtained results.

The presented dissertation is **191 pages** long. Structurally, it includes **6 chapters**, a **conclusion** and **appendices**. The results are obtained through modern tools and are illustrated with appropriately selected **31 figures**, **35 diagrams** and **205 tables**, which is proof of the qualities of the doctoral student as a very good researcher.

The structure of the dissertation research is logically constructed and corresponds to the set goal and tasks. The paper contains concrete results and empirical evidence that objectively reflect the real achievements of the research.

4. Discussion of the results and used literature.

The dissertation analyzes the modern scientific achievements in the field of innovations and their management to achieve high quality and sustainable development. The bibliography includes a *total of 58 sources*, **27** *of which are in English*. The indicated literature sources are current and directly related to the topic of the dissertation.

The systematizations and summaries made show *in-depth and conscientious work* with the literature, skills for application of analytical and deductive techniques for information processing with different research methods.

The first chapter of the dissertation substantiates the relevance of the research and presents statistical information on the importance of agriculture for the Republic of Serbia. The subject, the purpose of the research, the research tasks and the hypotheses are defined.

The second chapter is devoted to the theoretical foundations of the study, which clarifies the role and importance of innovation. The emphasis in this part is on innovations in agriculture and the analysis of the condition of agricultural holdings in the Republic of Serbia. In the course of the research the theoretical aspects of innovation management are considered, the evolution of the ideas, theories and approaches for innovation management is analyzed. A comparative analysis of the main hypotheses that the individual theories of innovation management defend over time and identifies the factors that influence the innovation activity of agricultural firms in Serbia.

The third chapter of the dissertation includes the research methodology in which a questionnaire has been developed in order to determine the priority questions for the subsequent research.

The fourth chapter presents the empirical research and the obtained results. An analysis of the profile of the respondents was performed. The reliability of the elements of the given system model has been established and the benefits and justification of the study have been calculated, factor, correlation and regression analysis have been performed.

The results of the research are presented in the **fifth chapter** of the dissertation, and the conclusions, recommendations and guidelines for future research are

formulated in the sixth chapter.

One of the merits of this work and personal contribution of the doctoral student is the construction of an adapted model in which the set factors are placed in interrelation and this dependence is examined for reliability by correlation analysis.

I can confirm with full conviction that the doctoral student has in-depth theoretical and methodological training and skills for independent research.

5. Contributions to the dissertation.

Contributions can be divided into scientific and scientific-applied.

<u>Scientific contributions</u> include the enrichment of knowledge in the field of innovation management, in particular the strategic management of innovation in agribusiness, through a developed methodology for research and analysis of innovations and their impact on the sustainable development of agricultural holdings in the Republic of Serbia.

The scientific-applied include:

- the proposed model with the help of which a correlation is made between the innovations and the sustainable development of the agricultural production systems;
- recommendations for improving the sustainable development of agricultural holdings in the Republic of Serbia, based on innovations and improving the quality of their products.

I accept the contributions as real, reliable and proven in the course of the dissertation research.

6. Critical remarks and questions.

The presented dissertation *is a completed study, with indisputable contributions and qualities*, to which I have no serious critical remarks, but I allow myself to give some recommendations:

- I consider the subject of research in the dissertation to be inaccurately defined. It sounds like a research goal. It is necessary to specify the object of study.
- The research could win if there is a greater correspondence between the aim and tasks of the dissertation.
- The bibliographic reference (58 sources) shows good literary awareness of the doctoral student, although the topic suggests the use of a richer set and more modern literary sources.
- In my opinion, the used literature sources allow to highlight the main points of the researched problem, but the fact that references to authors in the range 1992-2005, ie. when it comes to innovation, regardless of which of the elements of the marketing mix, it is good, after clarifying the main theoretical developments relevant to the topic, to give priority to newer research in the field.
- It is recommended that each chapter ends with conclusions that clearly show the implementation of the goal and related tasks.
- It is necessary to express more clearly and categorically one's own opinion on the considered theoretical problems.
- Scientific work could benefit from the balance between the individual chapters the presented structure focuses on the third and fourth chapters, which as a volume

(especially the fourth chapter) are significantly larger than the first, second and fifth chapters (which reveals possibility for better text balancing).

The recommendations made in no way diminish the value of the results achieved and the work done by the doctoral student.

At the same time I have a question for the doctoral student:

- Question 1: The empirical research was conducted by consulting up to 60 experts and 121 agricultural holdings. What does the author think - will there be differences in the conclusions of the study, provided that the respondents were representatives of the B2B and B2C markets, which are customers of these farms?
 - 7. Published articles and citations.

A total of 5 publications for the period 2019 -2020 are presented, dedicated to the dissertation, of which 3 co-authored and two independent. Four of them were presented at international scientific conferences in Serbia and one at an international scientific forum in Bulgaria.

These publications to some extent reflect the main achievements of the dissertation. The abstract is presented in the established form and content. It reflects in a generalized form the main results of the research and gives the necessary idea of the theoretical and applied achievements of the author.

CONCLUSION

Given the merits of the dissertation, the relevance and complexity of the researched problems, the need to find effective solutions for them in practice, the good theoretical level of the researched and analyzed problems, it can be summarized that the presented dissertation meets the criteria for awarding the educational and scientific degree "**Doctor**" / ZRASRB and the Regulations of the Agrarian University for its application /.

These results of the study, dedicated to "*Management of Innovation in Agricultural Holdings of the Republic of Serbia*" provide a sufficient basis for a **HIGH EVALUATION** of the scientific potential and research activities of the doctoral student.

All this allows me to confidently vote **POSITIVE** for the award of **Mirko Milan Milanovic** to the scientific and educational degree "Doctor" in the professional field 3.8. Economics, scientific specialty: *Economics and management (agriculture).*

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PRODUCED BY: (Assoc. Prof. Valentina NikoPova-Alexleva, PhD)

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