

SCIENTIFIC OPINION

on a dissertation for obtaining the educational and scientific degree "Doctor" in the field of higher education 3. Social, economic, and legal sciences, professional field 3.8. Economics, doctoral program "Economics and Management" / agriculture /

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

The topic of the dissertation: "MANAGEMENT OF THE INNOVATIONS IN THE AGRICULTURAL HOLDINGS IN THE REPUBLIC OF SERBIA"

Reviewer: Assoc. Prof. NADEZHDA BLAGOEVA, PhD Agricultural University, a field of higher education: 3. Social, economic, and legal sciences, professional field: 3.8 Economics, scientific specialty: "Finance, money circulation, credit and insurance", appointed as a member of the scientific jury with order № RD 16-1078/ 25.11.2020 by the Rector of AU.

1. Relevance of the problem.

The innovations in agriculture are a problem with a pronounced topicality. It derives both of the increased demand for quality agri-food products on the world market in recent years, as well as of the special importance of the agricultural sector for the Republic of Serbia. This significance is proven by the high share of the sector in GDP, by the significant employment it creates, and by the share of agriculture in the total exports of the country. We have to keep all these in mind also with the specifics of the agricultural sector in the Republic of Serbia. It occupies a leading position among European countries in terms of its large number of agricultural holdings with the predominant share of family farms namely. They occupy the dominant share of 99.5% and cultivate over 80% of the utilized agricultural area. All these arguments determine the PhD student's interest in the selected issue, where he makes his contribution.

2. Purpose, tasks, hypotheses, and research methods.

In the introduction the student accurately defines his goals, subject, sets 5 research tasks that he should perform to achieve his goal. According to it, the author puts his main research hypothesis, namely that the level of innovations and quality of agricultural products significantly affects the level of sustainable success of the individual family farms. In the course of the study, this thesis is proved by 4 auxiliary sub-hypotheses.

The methodology used includes a set of methods. They allow the PhD student to prove his thesis and include methods as follows: economical, statistical, mathematical, descriptive, comparative, monographic, graphical method, questionnaire survey, and others.

3. Visualization and presentation of the obtained results.

The dissertation is developed on 184 pages. They include an introduction, three chapters, after which the author presents a discussion of the results, conclusions, references, and appendices. The author uses 209 tables, 31 figures, and 35 diagrams to better visualize his work and perceive the multitude of data. The names of the tables, figures, and diagrams are indicated quite carefully. All used sources are accurately quoted. All this greatly contributes to the good perception of the dissertation. A large number of tables could be shortened to some extent, as the author considered a more systematic presentation of the tables with a similar structure.

4. Discussion of the results and references.

In his work, the author performs a detailed analysis of the concept of innovation and the different types of innovation. Subsequently, he details specifically the innovations in agriculture. Furthermore, the author considers the possibility of reaching the full capacity of the world market, which corresponds to the natural resources of the country, by applying innovations in agriculture in Serbia. To determine the impact of innovation and the quality of agricultural products on the sustainable success of individual family farms in the Republic of Serbia, the PhD student develops a special questionnaire. It includes a special selection of questions summarized based on the researches of the scientific literature. All of them are created following the ISO 9001 quality management standards. The survey is conducted among 60 Serbian experts in areas such as innovation, quality, and sustainable farm success. They include university professors, public administration officials as agricultural advisers, employed in institutes relevant to the field of research for 2 months. Subsequently, an analysis of the profile of the respondents is performed, the reliability of the elements of the given system model, the benefits and the justification of the research are established, a factor analysis of the model is made. As a result of his research, the PhD student proves the validity of the thesis formulated in the introduction that the level of innovation and the quality of agricultural products has a significant impact on the level of sustainable success of individual farms. This allows him in his concluding part to formulate some recommendations for stimulating the innovative behavior of farmers in Serbia.

The author cites 58 literature sources. The dissertation is supplemented with 2 appendices, which present the surveys of the research with the relevant questions.

5. Contributions to the dissertation.

In his autorefere, the author presents the culmination of his work that is reflected in the formulated total of 4 contributions, which can be divided into:

Scientific and theoretical contributions:

- Based on the in-depth literature analysis, a theoretical conceptualization of innovations in agriculture, their nature, types, and features was proposed.
- Based on the conducted theoretical, methodological, and practical research, a model has been adapted, with the help of which a correlation is made between the innovations and the sustainable development of the agricultural production systems.

Practical contributions:

- A methodology for research and analysis of innovations and their impact on the sustainable success of agricultural holdings has been developed, which can be adapted and upgraded for different purposes by other researchers.
- Possibilities for improving the sustainable development of agricultural holdings in the Republic of Serbia based on innovations and improving the quality of their products are justified.

I accept the above-mentioned conclusions as substantiated and proved in the research.

6. Critical remarks and questions.

The presented dissertation is a comprehensive study of the issues related to innovation management in the agricultural holdings in the Republic of Serbia. The PhD student shows the necessary knowledge and competencies to conduct independent research on a given problem, the ability to identify specific problems, and subsequently to seek opportunities for their solution. I have no serious critical remarks, but rather the following question:

Is there a difference in the ways suggested by the author to stimulate the interest in innovative activities on the part of farm owners, depending on the form of ownership -

family farm or corporate property? Is there a practice in Serbia of using tax incentives to arouse such an interest?

7. Published articles and citations.

The publications related to the dissertation are 5 in total. Four of them have been published in the participation of the PhD student at various forums in Serbia and one is from his participation in a scientific conference in Bulgaria. Two of the publications are with one author, and the other three are in an author's team. In them, Mirko Milanovich is in first, second, and third place respectively. All these five publications accumulate the required minimum of 30 credits. No reference is provided for observed citations of the cited articles.

CONCLUSION:

Based on the different research methods learned and applied by the doctoral student, the summaries and conclusions made, I believe that the presented dissertation meets the requirements of the Law of development of academic staff in Bulgaria and the Agricultural University Regulations. This gives me a reason to rate it **POSITIVE**.

All this allows me confidently to vote **POSITIVE** to award **MIRKO MILANOVIC** the scientific and educational degree "**Doctor**" in the professional field 3.8. "Economics", scientific specialty "Economics and Management (Agriculture)".

Date: 11.01.2021

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Reviewer:

Assoc. Prof. N.BLAGOEVA, PhD