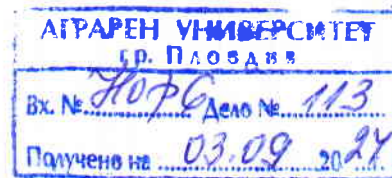


REVIEW



of a PhD thesis submitted for the award of the educational and scientific degree "Doctor" in the area on the higher education 3. Social, economic and legal sciences, professional direction 3.8. Economics, scientific speciality "Economics and Management (Agriculture)".

Autor of the PhD thesis: Nataliya Yordanova Shukadarova, a part-time PhD student at Economics Department of Agricultural University, Plovdiv

Title of the PhD thesis: Sustainability of Bulgarian grain production in the context of the European Green Deal

Reviewer: Assoc. Prof. Georgi Dimov Georgiev PhD, Technical University - Sofia, Branch Plovdiv, in the area on the higher education 3. Social, Economic and Legal sciences, Professional direction 3.7. Administration and Management, scientific specialty "Economics and Management", appointed with order № РД-16/854 from 28.06.2024 of the Rector of Agricultural University.

1. Actuality of the problem.

As can be seen from the title, the dissertation work is dedicated to a problem of strategic importance, such as the European Green Deal. Special attention is paid to its influence on the sustainable development of one of the key sectors of Bulgarian agriculture - grain production. The study of the Green Deal and its Farm to Fork and Biodiversity strategies is done through the lens of the UN's Sustainable Development Goals (SDGs). The opinion is also shared that sustainable production should strive to combine results in three directions: ecological, economic and social. In this regard, chapter three examines the possibilities for achieving sustainability of farmers from the "Grain production" sector by using the opportunities provided by the Bulgarian Strategic Plan for the Development of Agriculture and Rural Areas for the period 2023 - 2027.

2. Purpose, tasks, hypotheses and research methods.

The aim of the research is to determine the possibility of achieving sustainability of the Bulgarian grain production in the context of the European Green Deal.

Three main tasks are set:

- 1) Determining the sustainability of Bulgarian agriculture in its three dimensions in the context of the sustainable development goals of the UN Program until 2030;
- 2) Positioning of the "Grain production" sector in the conditions for supporting farms in the Strategic Plan for the Development of Agriculture and Rural Areas;
- 3) Study of the attitudes of Bulgarian grain producers regarding their participation in the implementation of policies, measures and instruments.

The main object of the research are Bulgarian grain-producing farms from the five strategically important regions of the country for grain production. Special attention was also paid to indicator 2.4.1 "Share of agricultural area occupied by productive and sustainable agriculture" within the framework of the UN Program until 2030. The preliminary conditions and interventions to support grain farms within the Strategic Plan

for the Development of Agriculture and Rural Areas for the period 2023-2027 have also been analyzed.

The PhD student has used a range of research methods. When determining the sustainability of Bulgarian agriculture, important strategic documents have been studied and a descriptive and comparative analysis has been applied.

The study of the attitudes of the Bulgarian grain producers was carried out by means of an author's survey with a total of 38 questions. Of these, 24 are for defining the profile of surveyed farms and determining the level of sustainability and 14 questions about the attitudes of farms from the "Grain production" sector. It covers 128 farmers - members of the National Association of Grain Producers (NAG).

The main thesis of the study is that the sustainability of grain production in the context of the European Green Deal can be achieved. It is proven through the Model of a sustainable grain-producing farm presented in the fourth chapter.

The purpose of the research is clearly formulated and the tasks that the PhD student sets lead to its achievement. The chosen research methods are appropriate. The survey has enough respondents to ensure the credibility of the findings.

3. Transparency and presentation of the results obtained.

The dissertation has a total volume of 221 pages. The theoretical part is presented on 63 pages, 10 pages cover the methodology, 102 pages are devoted to the author's research and analytical part, 14 pages are the constructive part and 3 pages are the conclusions. The text includes 6 tables and 45 figures.

4. Discussion of the results and references.

The dissertation is divided into four main parts, with an introduction and a conclusion. The first chapter is theoretical and in it Nataliya Shukadarova examines the main challenges between the concept of food security and environmental policies. In this context, the importance of grain production for food security at the global and national level is indicated. The concept of sustainable development and the United Nations Program for Sustainable Development until 2030 are presented. The European Green Deal and the two related strategies - "Farm to Fork" and the Biodiversity Strategy - are analyzed.

In the second chapter, the methodology of the research is presented. The purpose, tasks and chosen methods are briefly and concisely presented. The analytical framework of the particular survey is commented on. In it, 2 main groups of questions are structured - about the characteristics of farms from the "Grain production" sector and about their attitudes towards applying environmental practices, in the context of the new CAP and the ambitions of the Green Deal. and the working hypotheses of the study. The volume of the sample and the method of collecting the information are described.

The third chapter is empirical and Nataliya Shukadarova analyzes the development of Bulgaria on the way to achieving sustainable agricultural production in the context of the UN Program for the period up to 2030. In this regard, three main indicators were studied - agricultural factor income per annual labor unit, state support for scientific research and development in agriculture and area with organic farming. Attention has also been paid to the positioning of grain production in the Strategic Plan for the Development of Agriculture and Rural Areas for the period 2023-2027. The results of the survey on the attitudes of Bulgarian grain producers towards European green policies and the implementation of ecological practices have also been analyzed.

In the fourth chapter, summaries and recommendations are made regarding the achievement of sustainability of grain production under the conditions of the Green Deal. A Model of a sustainable grain-producing farm is presented and argued.

The bibliography is presented on the last 18 pages of the paper and includes a total of

140 sources of information (80 in Cyrillic; 57 in Latin and 3 internet sites).

In general, the dissertation is well structured and includes all the necessary basic elements. It is developed at a good theoretical level and offers interesting ideas and possible applied solutions.

5. Contributions of the dissertation.

The research in the dissertation submitted to me for opinion contains significant results united in six scientific and scientific-applied contributions. I accept the requested contributions:

1. Environmental and climate policies in relation to agriculture at the global, European and national level have been tracked.
2. The essence and parameters of the mandatory conditions and support interventions in the Strategic Plan for the Development of Agriculture and Rural Areas for the period 2023-2027, which concern the support of the "Grain Production" sector within the framework of the CAP, have been clarified.
3. An example of supporting a grain-producing farm within the framework of the direct payments of the Strategic Plan for the Development of Agriculture and Rural Areas has been presented.
4. The internal framework of an optimal production Model for 2023 of a sustainable grain-producing farm is defined.
5. Recommendations to the institutional and the external environment have been formulated, which lead to improving the sustainability of the Grain Production sector in the medium and long term.
6. A scheme of interactions in the sustainable agricultural system is derived.

6. Critical remarks and questions.

I have no significant critical comments on the research presented. My thorough familiarization with the dissertation work gives me the reason to suggest to the doctoral student Nataliya Shukadarova in her future studies to emphasize the social parameters of sustainable development. The thesis of the need for more active involvement of farmers can be considered through the concept of the Inclusive Economy. More specifically, this implies a real active involvement of professional communities in the overall process of drafting, discussing, adopting and implementing policies at European and national level.

7. Published articles and citations.

Two publications related to the dissertation are presented, both in English and published in Agricultural Sciences. The first of them is from 2022, and the second from 2023. In addition, there are two participations in scientific conferences.

The presented abstract reflects objectively the structure and content of the dissertation work. It gives a good idea of the purpose, the tasks, the hypotheses and the research methods used. The results of the author's research are correctly presented.


Conclusion:

Based on the different research methods learned and applied by the doctoral student, the correctly performed experiments, the generalizations and conclusions made, I believe that the presented dissertation meets the requirements of for scientific and educational degree "Doctor of Philosophy" and is in accordance with the Law on the Development of the Academic Staff in the Republic of Bulgaria(LDASRB) and the Regulations of the Agricultural University for the application of the LDASRB, which gives me reason to rate it **POSITIVE**.

I propose to the esteemed members of the Scientific Jury to vote in favour and award Nataliya Yordanova Shukadarova the educational and scientific degree "PhD" in

scientific speciality "Economics and Management (Agriculture)".

Date: 02.09.2024
Plovdiv

Reviewer: 
(Assoc. Prof. Georgi Georgiev PhD)