

REVIEW

by the Doctor of Economics, Professor, Head of the Department of International
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on the PhD dissertation of Du Wei

«Internationalization Strategy of Chinese Agriculture: Fostering Sustainable
Development and Promoting Global Food Security» in the field of study

05 – Social and Behavioural Sciences, specialty 051 – Economics

Relevance of the dissertation topic and its connection with research

programmes, plans, topics

The internationalization of agriculture is becoming a strategically important goal for China due to growing global challenges such as food security, climate change, land degradation and biodiversity loss. In the face of limited domestic resources – shrinking arable land, water scarcity and growing population needs – China is forced to tap into external markets to ensure a stable supply of agricultural products through diversification of import sources. Engaging in international markets also contributes to the spread of advanced technologies such as precision agriculture and ecological practices, which increase production efficiency and reduce environmental impact. Chinese investment and cooperation in the agricultural sector, in particular under the "One Belt, One Road" initiative, help stabilize global food markets and ensure mutually beneficial development for partner countries. At the same time, the country faces a number of challenges: geopolitical turbulence, political instability in partner countries, trade barriers, competition for resources and environmental responsibility. Thus, the internationalization of China's agricultural sector requires a strategic approach that combines economic feasibility with environmental and social responsibility. Du Wei's dissertation is devoted to the study of ways to implement the "going out" strategy of Chinese agriculture and its impact on global food security and sustainable development of the agricultural sector.

The results of the study are an important guideline for promoting the UN Sustainable Development Goals by 2030, in particular the eradication of hunger (SDG 2) and ensuring sustainable consumption and production (SDG 12). The study is relevant because it not only corresponds to the strategic goals of the Food and Agriculture Organization of the United Nations (FAO), but also aims to analyze the

development of international cooperation in the agricultural sector. The dissertation proposes new approaches to balancing the complex relationships between economic growth in agriculture, environmental protection, and social justice.

The dissertation is a part of the fundamental scientific research project on the topic: fundamental state budget funding research “Regional Security Model: Economic and Technical Aspects of Sustainable Development and Civil Protection in Wartime” (state registration number 0124U000063); international project “Regional Integration: European Benchmark under the Challenges of Global Fragmentation” (Erasmus+ Jean Monnet Module 101048216 – REFRAG – ERASMUS-JMO-2021-HEI-TCH-RSCH), research theme “Goeconomic and civilizational challenges of the development of the global economy” (state registration number 0123U104400); business funding research “Modern mainstreams of global development: economic, environmental, social and military challenges” (contract No ME-30-2022 dated 13. 06.2022).

The degree of validity and reliability of scientific statements, conclusions and recommendations

The aim of the work is a comprehensive study of the processes of internationalization of Chinese agriculture, the development of strategic recommendations for increasing its stability and contribution to global food security.

To achieve the stated goal of the study, the author uses a mixed methodology, combining quantitative analysis of statistical data (such as trade volumes, foreign direct investment flows and agricultural production) with qualitative analysis of policy documents, academic literature and empirical cases. In particular, the method of theoretical generalization is used to create a theoretical basis in the field of internationalization of agriculture and sustainable development; methods of analysis and synthesis are used to quantitatively assess the internationalization of agriculture; methods of deduction and induction are used to identify factors of development of the problems under study and the corresponding development of strategic directions of sustainable development and food security through the internationalization of agriculture; the method of cluster analysis is used to identify patterns of agricultural

development in Chinese provinces; and tabular and graphical methods are used to visualize data and key research results.

The dissertation reveals the ontology of agricultural development, in particular its sustainable development in the context of internationalization. The author analyzes the integration of agriculture into socio-ecological systems, its evolution from primitive forms to modern practices, and also emphasizes the importance of sustainable agriculture for optimizing resource use, increasing efficiency and preserving the ecological balance. Internationalization is considered as a factor in the modernization of the agricultural sector, the spread of technologies and global cooperation to solve problems such as food security, environmental protection and equitable development.

The author explores the main theoretical models of agricultural development and internationalization, assessing the possibility of their application to China's strategy (pp. 28–47). It is confirmed that the model of sustainable agricultural development, as the optimal direction of integration of scientific directions, ensures dynamic equilibrium through the interaction of economic, social and ecological systems.

An analysis of the evolution of global and national strategies for agricultural development and food security (pp. 48–58) allows us to conclude that agricultural progress plays a key role in ensuring food security. The author systematizes the challenges in four key aspects: availability, access, use, and sustainability.

A study of changes in China's strategy and policy priorities at different stages (pp. 63–69) highlights the important role of international organizations in promoting the internationalization of agriculture.

Using cluster analysis, the author identifies regional features of China's agriculture (pp. 72–84). In addition, a study of agricultural imports and exports indicates China's adaptation to global trends. Particular attention is paid to cooperation with Ukraine, which is an important food supplier for China. Chinese companies such as COFCO Group, investing in Ukrainian farmland, are introducing advanced technologies and increasing yields (pp. 92–109).

With the development of internationalization, China plays an increasingly important role in the international redistribution of agricultural capital. The country actively invests in overseas agricultural projects through direct investment, land lease,

mergers and acquisitions, resource optimization, technological cooperation and public-private partnerships. The impact of the “One Belt, One Road” initiative on the development of agriculture in Southeast Asia, Africa and Latin America is particularly noticeable (pp. 110–128).

The dissertation examines in detail the internationalization strategy of Chinese agriculture, which is aimed at: using scientific and technological progress to increase productivity; reducing environmental impact through environmentally friendly practices; developing financial support mechanisms; reforming land use and business models; and modernizing the agricultural value chain. The strategy is implemented through five main areas: trade expansion, foreign investment, technology transfer, infrastructure development, and international policy coordination (pp. 156–196).

The validity, reliability, and argumentation of the conclusions and recommendations presented in the qualification work are confirmed by a detailed analysis of specialized scientific literature. The theoretical and methodological basis of the study was the scientific works of leading economists, monographs, scientific articles, legislative acts of developed countries on waste management, Internet publications, statistical data, and analytical materials of international organizations.

Scientific novelty of the dissertation results

Among the main results containing scientific novelty, it is worth highlighting:

- for the first time, a strategy for the internationalization of China's agriculture was developed as a comprehensive framework model for strengthening global food security, promoting sustainable agriculture, activating international trade and investment, accelerating technology transfer, and supporting the development of rural areas;
- the cluster analysis method was improved to identify regional disparities in China's agriculture, as a result of which separate groups of provinces were identified by key indicators: regional GRP, urban and rural population distribution, agricultural production volumes, and participation in foreign trade;
- China's role in global agricultural capital flows and its contribution to the modernization of agriculture through such instruments as foreign direct investment, technology exports, the development of trade networks, and public-private partnerships

were investigated;

- the ontology of sustainable agricultural development in the context of internationalization is revealed, which provides for a holistic system of interaction of economic, social, environmental, resource and demographic factors that ensure balanced use of resources, food security and global cooperation;

- theoretical models of agricultural progress are systematized, in particular the theory of comparative advantage, the model of food sovereignty, the theory of global value chains and the model of sustainable development, and their impact on the formation of strategies for ensuring food security in the context of the growing internationalization of agriculture, the transformation of agricultural markets and the strengthening of global interdependence is analyzed;

- the main trends in China's cooperation with Ukraine and other regions of the world in the agricultural sector were identified, including the growth of trade in agricultural products, the creation of joint agricultural enterprises, as well as the development of scientific and technical exchange and the implementation of projects within the framework of the "One Belt, One Road" initiative, which contributes to the strengthening of food supply chains and the strengthening of geo-economic interaction.

Theoretical and practical significance of the results

The theoretical results of the dissertation research consist in revealing the theoretical and methodological foundations of internationalization and sustainable development of agriculture through the analysis of the interaction of economic, environmental and social factors.

The practical significance of the research lies in the development of strategic approaches to the internationalization of Chinese agriculture, which can be used by state bodies, international organizations, agricultural companies and investors to form effective policies in the field of food security, optimize foreign economic activity, introduce innovative agricultural technologies, strengthen international cooperation and ensure sustainable development of the agricultural sector both in China and in partner countries, in particular Ukraine.

Completeness of the dissertation materials in publications

The main results were published in 9 scientific works (total volume – 4.82 p. s., of which the author's contribution – 3.46 p. s.), including 5 publications in category “B” journals of Ukraine.

The profile of the publications and the content of the scientific works meet the established requirements for the completeness of coverage of the results of the dissertation work for the degree of Doctor of Philosophy in the field of knowledge 05 – Social and Behavioral Sciences in the specialty 051 – Economics. The number of published scientific works on the topic of the dissertation and the completeness of the reflection of the provisions of the work in such works meet the current requirements.

Personal contribution of the author and adherence to the principles of integrity

All results were obtained by the author independently. Joint publications use only ideas developed by Du Wei.

Plagiarism check (*Turnitin Similarity*) confirmed the absence of violations of academic integrity. The text of Du Wei's dissertation does not contain borrowings without proper reference to the source and complies with the principles of academic integrity. All available references to the source are made in compliance with the norms of the legislation on copyright and related rights.

Assessment of the structure, language and style of presentation

The content of the dissertation corresponds to the defined goal and objectives of the research, reveals the topic of the work and testifies to its integrity and completeness. The dissertation is well structured, written in business English, the material is presented using scientific professional terminology.

Comments on the dissertation and its discussion points

Du Wei's dissertation research formulates and substantiates a number of new scientific propositions and conclusions, some of which are debatable or require additional explanations:

1. In section 1.1, the author substantiates the advantages of the internationalization of agriculture and its importance for food security, however, it would be advisable to supplement the study with an assessment of the potential risks of this process, in particular market fluctuations, trade barriers, geopolitical instability, as well as environmental restrictions that may affect the sustainability of the strategy implementation.

2. The work examines the structure of China's foreign trade in agricultural products and institutional forms of international cooperation (section 2.2), however, it is worth considering in more depth the logistical aspects and management of supply chains, in particular the mechanisms of transportation, storage, product processing and digitalization of logistics processes in international agricultural exchange.

3. The author paid attention to the global aspects of food security, however, it is advisable to expand the analysis by considering its key components in more depth: physical and economic access to food, its proper use (quality, safety, nutritional value) and the stability of supply in the short and long term.

4. The dissertation presents general directions of China's international cooperation in the agricultural sector, however, it would be useful to supplement the work with specific examples of the implementation of the internationalization strategy, in particular, cases of investment projects or agricultural cooperation with Ukraine, which would allow for a practical illustration of theoretical provisions.

5. The author examines modern processes of internationalization and their impact on the transformation of China's agricultural sector (section 3.2), however, it is advisable to also consider the long-term consequences of these processes – both for domestic food security and for global ecological and economic balance, taking into account the dynamics of international challenges.

However, the above comments and discussion points do not affect the overall high assessment of the dissertation work and can serve as a basis for scientific discussion and the author's continuation of scientific research in the chosen direction.

General conclusion

Du Wei's qualification work "China's Agricultural Internationalization Strategy: Stimulating Sustainable Development and Promoting Global Food Security" is an independent, completed, reasoned, scientific research carried out on a relevant topic. The theoretical and practical results obtained are characterized by scientific novelty, are substantiated and contribute to solving the problem of environmental sustainability of international cooperation of China in the agricultural field and its impact on food security.

The dissertation meets the requirements of the "Procedure for Awarding the Degree of Doctor of Philosophy and Cancellation of the Decision of the One-Time Specialized Academic Council of an Institution of Higher Education, a Scientific Institution on Awarding the Degree of Doctor of Philosophy", approved by the Resolution of the Cabinet of Ministers of Ukraine dated January 12, 2022 No. 44, and its author – Du Wei deserves to be awarded the degree of Doctor of Philosophy in the field of knowledge 05 – Social and Behavioral Sciences in the specialty 051 – Economics.

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