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ABSTRACT

prepared for the dissertation degree of Doctor of Philosophy (PhD) in the field "8D04101- Public Administration"

TITLE: "PUBLIC ADMINISTRATION IN FOOD SECURITY IN KAZAKHSTAN: METHODOLOGY AND PRACTICES"

Relevance of the Research Topic Ensuring food security is not only one of the fundamental structural elements of the national security system, but is primarily regarded as a multidimensional socio-economic category directly linked to human security and the level of full and sustainable satisfaction of basic human needs. In contemporary public administration theory, food security is interpreted as one of the strategic indicators determining the internal stability of the socio-economic system and the long-term viability of society. Therefore, the mechanism for ensuring food security constitutes a key priority area of public policy.

The Head of State, Kassym-Jomart Tokayev, emphasizes the strategic importance of agricultural development, highlighting the need to strengthen state support, ensure efficient use of financial resources, attract innovation and investment, and establish a comprehensive production and logistics chain. In this context, one of the key tasks of the state is not only to ensure continuous and equitable physical access to food resources for the population, but also to systematically strengthen institutional and economic foundations that ensure long-term sustainability and resilience of food systems. Such sustainability, in turn, directly depends on the quality of managerial decisions that ensure the efficient, coordinated, and uninterrupted functioning of production, logistics, storage, processing, and distribution chains.

One of the most sensitive areas of public policy is enhancing the economic accessibility of high-quality and safe food for citizens. This represents a complex governance process involving continuous monitoring, evaluation, and regulation of key parameters such as income levels, consumption patterns, price dynamics, government support measures, as well as the scope and effectiveness of social protection systems and support mechanisms for vulnerable population groups.

Thus, ensuring food security is not a narrowly specialized issue of agricultural development, but rather a comprehensive, multi-level, and cross-sectoral process of public administration encompassing economic, institutional, social, and legal mechanisms.

According to 2024 estimates, approximately 673 million people worldwide suffer from hunger. It is evident that food security will remain a critical issue over the next 50 years. The primary reason lies in the contradiction between the growing demand for food—driven by economic development, increasing demand for biofuels, climate change, water scarcity, and environmental degradation—and the declining capacity of food production systems. In this regard, improving production, processing, distribution, and accessibility of food is a key factor in ensuring sustainable food security.

According to the development framework of the International Food Policy Research Institute (IFPRI) up to 2025, ensuring both economic and physical access to food for all requires maintaining stable production levels in the long term and strengthening the institutional foundations of the food system.

In the context of Kazakhstan, the relevance of food security issues is intensifying due to increasing internal challenges (socio-economic inequality, infrastructure constraints, insufficient income diversification, dependence on imports) and external risks (price volatility, logistical disruptions, climate change, and geopolitical uncertainty). In this regard, the present study aims, on the one hand, to systematize and advance theoretical and methodological approaches to the state regulation of food security, and on the other hand, to comprehensively assess the effectiveness of existing state support mechanisms and develop a governance model that takes into account national specificities. The findings of the study are intended to contribute to the evidence-based improvement of public policy in the field of food security, enhance welfare and resilience, and strengthen the overall architecture of national security.

Research Aim and Objectives. The main **aim** of this doctoral dissertation is to conduct a comprehensive analysis of the impact of food security on the well-being of low-income households in Kazakhstan and, on this basis, to identify directions for improving the methodology and practice of the public administration system in this field. This aim is of particular importance from the perspective of evaluating the effectiveness of public governance, since food security constitutes not only an economic issue but also one of the key strategic pillars for ensuring social stability.

Accordingly, the study focuses on identifying the mediating role of resilience and the moderating role of state support measures, with the purpose of revealing the specific governance mechanisms underlying the relationship between food security and well-being.

The findings of this analysis are expected to provide scientifically grounded solutions for enhancing the methodology and practice of public administration in Kazakhstan. The recommendations developed in the course of the research are intended to support the optimization of public policy, the food security system, and social protection programs. This, in turn, will contribute to improving the well-being of vulnerable groups, strengthening social equity, and increasing the effectiveness of food security governance at the national level.

In order to achieve the stated aim, the following **objectives** are pursued:

1. To conduct a comprehensive and systematic bibliographic and theoretical review of domestic and international academic literature on food security, population well-being, and resilience, identifying key conceptual approaches and debated issues.
2. To analyze public governance practices in ensuring food security in foreign countries, identify institutional features, formation preconditions, and key influencing factors, and assess their potential for adaptation and application in the context of Kazakhstan.
3. To develop a methodological framework for the empirical study of low-income households in Kazakhstan, including the scientific justification of data

collection instruments, sampling framework and strategy, as well as statistical and econometric methods of data analysis.

4. To empirically examine the relationship between food security and the well-being of low-income households, assessing the mediating role of resilience and the moderating effect of government support measures based on multifactor models.

To develop evidence-based conclusions and recommendations, grounded in theoretical and empirical findings, aimed at improving public policy and social support programs in order to enhance food security and improve the well-being of low-income households.

Object of the research. the system of public administration aimed at ensuring food security in the Republic of Kazakhstan.

Subject of the research. the set of socio-economic and managerial relations arising in connection with food security in Kazakhstan, including the food security of low-income households, their well-being, resilience, and government support measures.

Research methods. To systematize and structurally analyze the scientific literature, bibliometric and visualization tools such as VOSviewer and Bibliometrix (R-package) were employed. These software tools made it possible to identify and map the dominant research streams, conceptual structures, thematic clusters, frequently cited authors and publications, as well as the key scientific schools and research networks within the conceptual field of "food security – well-being – resilience – state support."

To empirically test the proposed research model and the formulated hypotheses, a complex of statistical and econometric software was applied, including Stata, SmartPLS, and PROCESS Macro. These tools enabled the rigorous execution of advanced analytical procedures, including data preprocessing, diagnostics of multicollinearity, assessment of the validity and reliability of measurement models, testing of structural relationships, and the analysis of mediation and moderation effects, in accordance with established scientific standards.

The scientific novelty of the dissertation consists of the following:

1. Based on an extensive literature review and bibliometric analysis, the concepts of Good Governance Theory (GGT) and Resilience Theory (RT) were integrated, and a new theoretical–paradigmatic framework was proposed that systematically describes the interrelationships between food security, the well-being of low-income households, resilience, and government support. This integrative approach made it possible to develop a new analytical model for studying the well-being of low-income households in line with the objectives of the research.

2. In accordance with the research objectives, effective institutional practices of various countries in the field of food security provision and public governance were systematized, and on this basis a new set of comparative and analytically grounded policy recommendations aimed at strengthening food security in Kazakhstan was developed.

3. On the basis of empirical data collected on low-income households in Kazakhstan, an authorial structural model was proposed that enables a comprehensive assessment of the factors affecting their food security and well-being. In line with the

object and subject of the study, this model quantitatively represents the logic of interaction between food security, well-being, resilience, and government support.

4. As a result of the study, a new conceptual and empirical model was developed to explain the relationship between food security and the well-being of the population (low-income households). Within this model, the mediating role of resilience and the moderating effect of government support were empirically validated for the first time using a comprehensive structural model adapted to Kazakhstan's data. The model demonstrates that food security affects well-being not directly but indirectly through resilience, while government support strengthens the intensity of these indirect relationships.

5. Based on the research objectives and the results of the empirical model, for the first time a scientifically grounded integrated system of managerial recommendations was developed to enhance the effectiveness of public policy aimed at strengthening food security and improving the well-being of low-income households in Kazakhstan. These recommendations are based on empirical evidence describing the "food security – resilience – well-being – government support" nexus and are aimed at improving support mechanisms, optimizing targeted resource allocation, and shaping evidence-based policies oriented toward the needs of socially vulnerable groups. The research results provide a new analytical foundation for applying the principles of evidence-based policymaking in the design and implementation of state programs in the field of food security.

Theoretical and Practical Significance of the Study. This study makes both theoretical and practical contributions to the fields of food security, well-being, resilience, and public support.

From a theoretical perspective, the research enriches the academic literature by examining the impact of food security on well-being. By integrating the concepts of public support and Good Governance Theory, the study identifies key determinants and analyzes their interrelationships within a unified analytical framework. The application of bibliometric methods resulted in the identification of four major knowledge clusters, which enhances the understanding of the structure of existing research and supports the systematic development of future studies. The dissertation conceptualizes public support as a moderating factor influencing the stability of the food system, thereby contributing to a more nuanced understanding of governance mechanisms in food security research. This approach improves the transparency, rigor, and applicability of empirical research in this field.

From a practical perspective, the findings offer valuable insights for public administration authorities and agricultural sector stakeholders in designing and implementing food security policies. In particular, the results support the development of strategies aimed at strengthening the resilience of food systems, including climate adaptation measures, the promotion of farmer cooperation, and policies addressing social inequality in rural areas. Furthermore, the study highlights the potential of digital platforms and innovative technologies for improving food supply monitoring and optimizing resource use. Overall, the research provides an evidence-based foundation for enhancing food security governance and reinforcing public support mechanisms to promote sustainable development and societal well-being.

Description of the doctoral candidate's contribution to each publication

The main provisions and conclusions submitted for defense are reflected in five scientific publications, including one article published in a journal with a non-zero impact factor and indexed in the Scopus database, and four articles published in journals recommended by the Committee for Quality Assurance in Science and Higher Education of the Ministry of Science and Higher Education of the Republic of Kazakhstan, 2 - articles published in collections of international scientific and practical conferences.

Given the doctoral candidate's specialized qualifications and practical experience in the field of the dissertation topic, all stages of the research and preparation of the dissertation were carried out independently by the author.