

Brief information about the project

Name of the project	Agro-industrial complex of Kazakhstan as a new point of growth for sustainable development: analysis of long-term macroeconomic consequences of climate change
Relevance	The relevance of the research lies in the fact that the sustainable development of the agro-industrial complex, recognized as a growth area in Kazakhstan, is aimed at addressing three fundamental challenges: ensuring food security for all categories of socially important goods, opening exports, the potential of livestock and agricultural processing, and efficient operations. Considering the climate image of the economy will help identify priority objectives, such as ensuring coverage and adequate well-being for workers.
Purpose	Development of a Climate Strategy based on the study of effective adaptation methods that help minimize the long-term macroeconomic consequences of climate for the sustainable development of the agro-industrial complex of the Republic of Kazakhstan
Objectives	1. Analysis of the theoretical and methodological foundations of the need to develop a Climate Strategy as a result of a review and generalization of domestic and foreign literature, taking into account the best foreign experience of effective methods of adaptation to changing climatic conditions; 2. Review of the practice of implementing measures to mitigate the macroeconomic consequences of climate change and analysis of the risks of sustainable development in the context of climate change in agricultural regions; 3. Analysis of effective adaptation methods to minimize the macroeconomic consequences of climate change in ensuring sustainable development of the agro-industrial complex of Kazakhstan.
Expected and achieved results	At the final stage of the research work: - Identification of factors and economic risks hindering the sustainable development of the agro-industrial complex in the context of weather fluctuations in Kazakhstan will be carried out on the basis of the stochastic growth model; - as a result of studying effective adaptation practices to mitigate the long-term macroeconomic effects of a changing climate, an adaptive climate strategy will be developed; - at least 2 (two) articles or reviews in a peer-reviewed scientific publication indexed in the Science Citation Index Expanded and included in the 1st (first) or 2nd (second) quartile by impact factor in the Web of Science database and (or) having a CiteScore percentile in the Scopus database of at least 70 (seventy) ; - at least 2 (two) articles or reviews in a peer-reviewed foreign or domestic publication recommended by the CQASHE; One of the articles must be categorized as multidisciplinary (multidisciplinary or interdisciplinary practical application). Also based on the results of the project implementation will be carried out:

	- training of at least 1 (one) PhD or doctor in the relevant field (training jointly with higher education institutions licensed for postgraduate education in doctoral studies is permitted). - 1 an application will be submitted to the Ministry of Justice of the Republic of Kazakhstan for a certificate of registration of rights to an intellectual property object-a scientific work in the form of a scientific monograph; - 3 (three) articles (conference materials) in the materials of domestic and (or) international scientific conferences are published. - dissemination of research results among potential users, the community of scientists and the general public. The results of the study are planned to be reported and discussed at international scientific and practical conferences, symposiums. It is also planned to publish monographs and articles in leading publications and journals recommended by the Ministry of Education and science of the Republic of Kazakhstan.
Research team members with their identifiers (Scopus Author ID, Researcher ID, ORCID, if available) and links to relevant profiles	Project Manager: Laila Abdrashovna Bimendieva, Candidate of Economic Sciences, Associate Professor, Al-Farabi Kazakh National University, Higher School of Economics and Business, Associate Professor-Researcher, Department of Economics; Researcher ID AGX-6591-2022, ORCID ID https://orcid.org/0000-0003-4965-5908, SCOPUS ID https://www.scopus.com/authid/detail.uri?authorId=57190878703. Research Group Members: 1. Leading Researcher - Laszlo Vasa, PhD, Professor, István Széchenyi University (Győr, Hungary), Research Professor, Researcher ID: V-4749-2018, ORCID ID https://orcid.org/0000-0002-3805-0244, Scopus Author ID: 16317891500; 2. Leading Researcher - Aliya Sagyndykovna Aktymbayeva, Candidate of Geography Sciences , Professor, Al-Farabi Kazakh National University, Dean of the Faculty of Geography and Nature Management, Researcher ID: N-9777-2014, Scopus Author ID: 55916649100, https://orcid.org/0000-0003-1269-4356; 3. Leading Researcher - Gulnara Tuleshova, Candidate of Economic Sciences, Associate Professor, "Zhetysu University named after I. Zhansugurov", https://orcid.org/0009-0001-4717-0969, Scopus Author ID: 57196424136; 4. Leading Researcher - Assem Yermekovna Kaliyeva, PhD, Al-Farabi Kazakh National University, Higher School of Economics and Business, Associate Professor and Researcher, Department of Economics, Scopus author ID: 56646470400, https://orcid.org/my-orcid, ID orcid.org/0000-0002-1154-4287, ResearcherID - C-6014-2015, https://www.webofscience.com/wos/author/record/OIT-6395-2025; 5. Research Fellow - Salibekova Perizat Qalmyrzaqyzy, “Almaty Management” University, Senior Lecturer of the “School of Digital Technologies and Economics”, Scopus ID: 57211476540, ResearcherID GZM-5273-2022, ORCID ID https://orcid.org/0000-0003-2186-1152; 6. Junior Research Fellow - Syrbek Perizat Nurkenqyzy, Al-Farabi Kazakh National University, Higher School of Economics and Business, Department of Economics, 3rd-year doctoral student

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Usage	The results of the study can be used by government agencies in the formation of strategies for adaptation to climatic changes and sustainable development of Agriculture. In addition, they can serve as the basis for the development of national and international research aimed at reducing the impact of climate change and supporting food security.
Priority compared to real-world alternatives	
List of publications with links to them	1. Baltabay T., Bimendiyeva L., Kaliyeva A. Economic development of agriculture in Kazakhstan in the context of climate change. <i>Central Asian Economic Review</i>. 2025;(6):83-101. https://doi.org/10.52821/2789-4401-2025-6-83-101.
Patents	no