The Project name: IRN №AP09259525 «Methodology of analysis and optimization of the rural county socio-economic model (based on the materials of the Northern Kazakhstan)»

Relevance: systematic research on the optimization of socio-economic relations in rural counties of Northern Kazakhstan has not been carried out until now. Ways and means of integrating human, agroecological, social and market factors to form optimal socio-economic models of rural territorial systems, taking into account the current conditions of Kazakhstan, require rethinking.

The practical significance of the expected results is to develop recommendations for the formation of optimal economic models of rural counties, regional socio-economic programs that contribute to improving the standard of living in rural areas, reducing unemployment and social tension, and optimizing migration flows.

The main problem addressed is the increase and alignment of the level of well-being of the rural population.

Purpose: to develop a methodology for analysis and measures to form an optimal socio-economic model of rural counties.

Results expected: 1) methodological tools for calculating the resource availability of the rural county population; 2) methodological tools for calculating the level and evenness of income distribution among the population of a rural county; 3) methodological tools for integrated assessment of rural county resources based on a mathematical model; 4) optimal economic model of a rural county (with a brand product(s), a form of business organization that maximizes the synergetic effect of interaction between economic entities of the county, the leader-organizer), which would assure the most efficient use of resources, sustainable earnings growth and alignment of wealth distribution in a rural area;5) recommendations for permanent monitoring of the level of income and evenness of the income distribution among the population of a rural county.

On the base of the research results, 3 scientific articles will be published in scientific journals, including 1 article in a peer-reviewed scientific publication with a CiteScore percentile in the Scopus database of at least 35 (thirty-five), 2 articles in peer-reviewed foreign and (or) domestic publications recommended by CQAES.

Results achieved in 2022:

- 1) a database on indicators of the well-being of the population and the availability of economic resources in a rural district based on the results of a survey of 489 households of Novomarkovsky rural district of Yerementau district of Akmola region;
- 2) methodological techniques and procedures for assessing the availability of economic resources for households, the level and degree of uniformity of income distribution among the population of the rural district.

The novelty of the results consists in the development and practical application of methodological techniques and procedures that allow us to assess the average indicators of well-being and availability of resources for the rural population and the degree of uniformity of income distribution among rural households. Also, the proposed techniques allow us to determine the presence and strength of the relationship between qualitative indicators measured on a dichotomous scale and quantitative varying signs. Another novelty consists in taking into account the class of conditionally calculated incomes in calculating the level of welfare and income distribution among the population of the district. It is established that in the conditions of the rural district under study there are significant disparities in the distribution of income among households. This circumstance objectively hinders the growth of the solvent potential of the population and hinders the economic development of rural areas. A structured database on the state of human, agroecological, social and market factors serves as a starting point for searching and making decisions on the formation of effective socioeconomic models of rural areas, especially in depressed regions.

Members of the research group:

- Project manager Talgat Kussaiynov, Doctor of Economics, Professor. The H-Index is 3 https://www.scopus.com/authid/detail.uri?authorId=56200205600. Position and role in the project supervisor, project administration; development of questionnaires for household surveys on indicators of well-being, resource availability; calculation of the level and evenness of income distribution among the population of the rural county; development of a set of regression equations to describe the relationship and quantify the impact of resource availability characteristics on the level of household well-being; calculation of the optimal economic model of the rural county and development of recommendations for increasing and aligning the level of well-being of the rural county population; formation of a group of highly qualified specialists and development of instructions for post-project support of the developed methodological tools;
- Gulnara Mussina, Master of Economics. Position and role in the project senior researcher-assistant manager, development of questionnaires for household surveys on indicators of well-being, resource availability; calculation of the level and evenness of income distribution among the population of a rural county; development of a set of regression equations to describe the relationship and quantify the impact of resource availability characteristics on the level of household well-being; calculation of the optimal economic model of the rural county and development of recommendations for increasing and aligning the level of well-being of the population of the county;
- Zhanna Bulkhairova, PhD. H-index 2 https://www.scopus.com/authid/detail.uri?authorId=57203804842. Position and role in the project senior researcher, study of the state of individual entrepreneurship in the rural county, the market of household products, development of recommendations for the selection of effective forms of organization of individual entrepreneurship and cooperation at the level of rural county households;
- Sandugash Tokenova, PhD. Position and role in the project senior researcher, study of the state of grasslands and their availability to households, crop production in the rural county (survey of households on indicators of economic resource availability; collection and formation of a database on crop production, statistical data processing); development of recommendations for improving the provision of grassland resources to households;
- Zina Shaukerova, Candidate of Economic Sciences. Position and role in the project senior researcher, calculation of the availability of economic resources for households; assessment of income distribution among the population of the rural district.
- Toleibergenova, Zhanna Sultanovna, rural county statistician. Position and role in the project researcher, analysis of the economic activity of the rural county; survey of households on indicators of well-being, availability of resources; collection and formation of a database on the state of grasslands. Candidate selection criteria: higher education, work experience in the sector at least 5 years, including in the selected county at least 2 years, communication skills, knowledge of MS Office and communication technologies;
- Kurbanaliev, Shavkat Babyrzhanovich, MSc student. Position and role in the project junior researcher, household survey on indicators of well-being, availability of resources; calculation of the level and evenness of income distribution among the population of the rural county; testing of the economic model of the rural county. Candidate selection criteria: communication skills, knowledge of MS Office and communication technologies.

List of publications and patents published under this project (with links to them):

1. Kussaiynov, T.A. Methodology of selection of objects for social research// ECONOMIC Series of the Bulletin of the L.N. Gumilyov ENU. $-2021. - N_{\odot}3. - C.35$ - 48 (recommended by the CSQSES of the MES of the RK).

https://bulecon.enu.kz/article/archive/view?id=representativeness-and-methods-of-selectingobjects-for-social-research-2

- 2. Kussaiynov, T. Multi-Criteria Choice and Ranking of the Objects for Socio-Economic Studies // WSEAS Transactions on Business and Economics. 2022. Vol. 19. pp. 1099-1106. https://doi.org/10.37394/23207.2022.19.96
- 3. Shaimerdenova A.K., Bulhairova Zh.S., Temirova A.B. Personal subsidiary farms of Damsinsky rural district of Akmola region: analysis of agricultural production // Problems of AgriMarket. − 2022. − №1. − pp.99-104. https://doi.org/10.46666/2022-1.2708-9991.11
- 4. Kussaiynov, T., Assilov, B. The impact of technological innovations on labor productivity in crop production // Problems of AgriMarket. $-2022. N_{\odot}3. pp.82-89. \frac{https://doi.org/10.46666/2022-3.2708-9991.09$

Information for potential users: dissemination of the results of the work among potential users, the community of scientists and the general public will be carried out through the Extension system of S. Seifullin Kazakh Agrotechnical University and by highlighting the project results in the mass-media.

For post-project support of the developed methodological tools and their implementation in practice, a group of highly qualified specialists will be formed and appropriate documentation (instructions) will be developed.