

ҚОРАҚАЛПОҒИСТОНДА ФАН ВА ТАЪЛИМ

ҚАРАҚАЛПАҚСТАНДА ИЛИМ ҲӘМ ТӘЛИМ

НАУКА И ОБРАЗОВАНИЕ В КАРАКАЛПАКСТАНЕ

SCIENCE AND EDUCATION IN KARAKALPAKSTAN



Science and Education in Karakalpakstan ISSN 2181-9203

<u>№2/2 (33)</u> 2023

Science Magazine chief editor: Reymov A.M.

Deputy editor in chief: B.Utemuratov

Executive secretary: Sh.N.Abdinazimov

Editorial board:

Ayimbetov N.K. Dr of Economic Sciences academician

Turdimambetov I.R. Doctor of Geography Ataniyazova O.A. Dr of Medical sciences Aleuov W. Doctor of Pedagogy Ubaydullaev Kh. Dr of Economic Sciences Umarova Q.U. Doctor of Law Berdimuratova A.K. Doctor of Phylosophy Abdullaeva J.A. Dr of Hist. Sciences Ayimbetov M.J. PhD in Technical Sciences Auezov O. Doctor of Tech. Sciences Baimanov K.I. Dr of Technical Sciences Bokieva G. Doctor of Philology Jarimbetov K.H. Doctor of Philology Juginisov T.I. Dr of Biol. Sciences Ismayilov K.A. Dr of Phys-math sciences Kayypbergenov B.T. Dr of Tech. Sciences Kayypbergenov A.T. Dr of Tech. Sciences Kuranbaev K. Doctor of Philology Kudaybergenov K.K. Dr of Phys-math sciences Kushiev H. Dr of Biol. Sciences Mambetnazarov B.S. Dr of Agr. Sciences Mambetullayeva S.M. Dr of Biol. Sciences Murtazayeva A.D. Dr of Hist. Sciences Muslimov N. Doctor of Pedagogy Nizamatdinov K.K. PhD in Law sciences Nishonova Z.T. Dr of Psychology sciences Oripova M.H. Dr of Tech. Sciences Rakhmonov I.U. PhD in Technical sciences Razhapov A. Dr of Tech. Sciences Sadullaev A. Dr of Phys-math sciences, acad Tagaev M.B. Dr of Phys-math sciences Toreniyazov E.Sh. Dr of Agr. Sciences Utebayev T.T. Doctor of Pedagogy Holbaev I. Dr of Phys-math sciences Duysenbaev O.I. PhD in Philology Kurbanbaev T.K. PhD in Phys-math sciences Shermuhamedova N. Doctor of Phylosophy Egamberdiev F. Dr of Economic Sciences Kalekeev K.J. PhD in Philology

Tleumuratov G. PhD in Philology Kubeysinova D.T. PhD in Philology Ismaylov B.K. PhD in Phys-math sciences Kurbanbaev Dj. A. PhD in Pedagogy Seytjanov J.E. PhD in Philology

Editorial office address:

1 Ch. Abdirov Str., Nukus 230100, Karakalpakstan, Uzbekistan Phone: 223-60-19

Authors are responsible for the accuracy of the information given in articles.

·	
NATURAL SCIENCES	
Utebaev B.D., Tleuov K.O. Numerical solution of a heat and moisture	4
transfer equation.	4
Oteuliev J.B., Allombergenova K.A. Agrochemical Characteristics And	
Salt Regime Of Field Soils On Which Main Crops Are Planted (as an	10
example of the farm "Xojamurat Utambetov" in Khojeli region)	10
Asenov G.A., Samandarov O.K. Spread of rodents between	
vozrozhdenie on the built bottom of the aral sea	14
Orazbayeva R.I., Pattakhova D.A., Rakhimkhodzhaev S.S.,	
Abdisadikova G. Influence of some parameters on the structure of shirt	
fabrics	17
Sharibaev M.B. Influence of temperature on the Optical properties of the	
Cdse/znse heterostructure with quantum dots	25
Aimbetova G.N., Yesbergenov H.S., Yelmuratov Q.Q. Face	
recognition technologies and methods	30
Khamidov V.S., Novqochev P.N. Gravitational lensing in plasma	37
Ibragimov M.M. Geometric properties of geometric tripotents and split	57
· · · · · ·	10
faces in neutral SFS -space	43
TECHNICAL SCIENCES	
Kasimov J.A. Organization of educational system based on graphic	
programs	50
Bobojonov Y.M., Reymov K.M., Seitmuratov B.T. Asynchronous	
generator with automatic reactive power controller	56
Sadikov Sh.M. Organization of a mechanism for limiting the use of the	
organization's database role-based access control model	61
Kuchinov H.A., Babakhodzhaev R.P., Sadiev A.A., Quwatbaev P.K.	
Method for calculating the main parameters of contact heat exchangers	
based on experimental data	66
Melikuziev M.V., Usmonaliev S.J., Najimova A.M. Issues of the design	
procedure for the power supply system.	71
Aytbayev K.R., Qurbaniyazov A.J. Heating device with intermediate	71
coolant	77
Sadikov Sh.M. The concept of providing information security in a	,,
distributed system of organizational database	82
	62
Kasimov J.A. Building a 3D model of hydraulic structures using bim	00
technology	88
Orakbaev A.A., Kurbaniyazov R.K., Namazov Sh.S., Usanbaev	
N.Kh., Akhmedova I.K. Technology for producing humic simple	
superphosphate based on oxidized liqorice food with hydrogen peroxide	~~
and phosphorites of Karakalpakstan	93
Adinaev Kh.A., Kadyrova Z.R. X-ray analysis of quartz sands of	
Surkhandaryo region for improving of Glass composition	101
Sabirov B.T., Purkhanatdinov A.P., Aytjanov O.D., Erimbetov B.K.,	
Kalbaev B.A., Reymov B.Q. Study of the Chemical-mineralogical	
composition and properties of the Ushsay bentonite-like clay of	
Karakalpakstan for obtaining Ceramic heat-insulating materials	105
Botirov F.B. Precedent analysis methods for Response to information	
security Incidents	110
Adylkhodzhaev A.I., Makhamataliev I.M., Ilyasov A.T., Pishenbaev	
K.B. A new method of Manufacturing products from non-autoclaved	
foam Concrete	115
Botirov F.B. An improved precedence analysis Architecture and	-
algorithm for Information security incident Response	120
Reymov A., Abdulxaev T., Raxmatkarieva F., Kuldashova Sh.,	120
Bahronov Kh. Thermokinetics of Water adsorption in zeolite Agzsm-5	125
Isaev R.I., Tursumuratov S.S., Shaudenbaev N.M. Assessing of	143
reliability indicators of Fiber-optic communication lines using statistical	
	131
Data	

Oʻzbekiston Respublikasi Вазирлар Махкамаси хузуридаги ОАК Tartib-qoida komissiyasi qarori 24.05.2017 у., №5/2.

Постановление комиссия по регулированию ВАК Республики Узбекистан при Кабинете Министров от 24.05.2017 г. №5/2. Resolution of the Regulation Commission of the Supreme Attestation Commission of the Republic of Uzbekistan from 24.05.2017 у. №5/2. Science and Education in Karakalpakstan



SOCIAL SCIENCES Sarsenbaev B.A., Jumamuratova Kh.O. Ways of forming revenues of local budgets..... 137 Sauxanov J.K., Ospanova F.B. Types of transaction costs in small business management and their impact on the competitiveness of enterprises..... 141 Kenesbaev K. Journalism in Karakalpakstan Some issues of scientific and pedagogical study..... 145 Atamuratova M. The influence of sufism teaching on the compositions of Karakalpak poets..... 149 Orazbayeva G. Value representations in the family-school-student system..... 154 Nurboev K.A. Some aspects of iranian history, religion, customs in the works of Abu Rayhan Beruni..... 160 Jumabaev T.Zh. The problem of Developing vocational qualities in the System of Psychological training..... 164 Khujanov Z.B. Minimum consumption expenditure of the Population and poverty criteria..... 170 Allanazarova B.J. Dynamics of social processes: social bifurcation and social attractors..... 177 Mambetnazarova A.M. Foreign experience in assessing colorage for bank loans: a comparative analysis of approaches 181 in the USA, Germany and the Uk..... Bauetdinov M.J. Ways to ensure the Financial stability of Business subjects..... 186 Kamalov B.Sh. Improving the quality of Education of non-state preschool educational institutions organized in a stateprivate partnership..... 191 Kosnazarov M. Business management structure in the Modern world: trends, challenges and prospects..... 195 Bekimbetova G.R. Methods of Teaching Karakalpak to other language groups..... 201 Turakhanov A.A. The essence of the Concepts of "Negative ideology", "Social threats" and "Psychological stability"... 206 Bekimbetova G.R. Considering learners' levels of knowledge in teaching Karakalpak language in foreign language 215 Classes..... Abdullaev A.J. Principles and methods of organization of agroclusters..... 219 Pirnazarova J. The importance of benchmarking in the diversification of agricultural production..... 225 Abdullaev A.J. Theoretical foundations of agrocluster management..... 230 HUMANITIES SCIENCES Kabulov Kh.A. Priorities in the fight against corruption in the administration of justice..... 235 Tleumuratov G., Koshanova S. The etymological analysis of loanwords within the context of the modern English 239 language..... Kazakov B.A. Physical education and mental health..... 244 Nasirova A.P. The noun and verb metaphors in Karakalpak folk aitys..... 247 Abatov J. O. Methods of teaching fine arts and historical sciences based on an integrated approach..... 253 Seytova D.U. The international nature of computer terms in English language..... 258 Kurbanbayeva U.J. Solution of environmental problems from the point of view of social philosophy (on the sample of the Aral region) 261 264 Kdirbayev B.B. The importance of media in elections and media culture of the public..... 269 Khalmuratov M. Measure of restraint in the form of detention in criminal proceedings..... Saymanova A.M. Emotional phraseologisms in Karakalpak folk songs..... 272 Kurbanbaev Dj.A., Jumaniyazov A.A. Psychological basis of assessing communicative competence of learners...... 276 Baymuratova S.M. Potential for hotel services in the Republic of Karakalpakstan..... 280 Adimova N.K. The cultural significance of Phraseological units..... 283 Masharipov R.R., Kurbanbaev A.D., Tuxtapulatov Sh.N. Ways to develop speed in the volleyball Players..... 286 Kojikbaeva Z. The position of a Journalist in the struggle for Truth..... 292 Masharipov R.R., Kurbanbaev A.D., Boltayev Z.B., Tuxtapulatov Sh.N. The effectiveness of teaching Speed 297 training to young volleyball players..... Kurbanbaev Dj.A., Jumaniyazov A.A. Didactic basis of assessing communicative competence of foreign language learners..... 301 Konisov G.U. Basic principles of using clil at Schools..... 305 Uteshova Z., Matmuratova S. Methodological features of the Developing of English language linguocultural competence in high school students..... 307 Otemisov A.Z. On the Etymologies of Some phytonyms in the Karakalpak language..... 311 Uteshova Z., Matmuratova S. Visual and auditory stimulation: Enhancing language learning through multimedia...... 315 Konisov G.U., Urazniyazova G. The peculiarities of a Close test in language learning..... 317 319 Kaypova S.K. Pedagogical assurance of the Quality of a lesson at the University..... 321 Uteshova Z., Matmuratova S. Importance of english language proficiency in higher Education institutions (HEUs)..... Kaypova S.K. The concept and essence of monitoring in the field of education..... 325 Saymanova Sh. The usage of metaphors in english and karakalpak poetry 329

Oʻzbekiston Respublikasi Вазирлар Махкамаси хузуридаги ОАК Tartib-qoida komissiyasi qarori 24.05.2017 у., №5/2.

Постановление комиссия по регулированию ВАК Республики Узбекистан при Кабинете Министров от 24.05.2017 г. №5/2.

Resolution of the Regulation Commission of the Supreme Attestation Commission of the Republic of Uzbekistan from 24.05.2017 y. №5/2.

THEORETICAL FOUNDATIONS OF AGROCLUSTER MANAGEMENT

Abdullaev A.J

Bukhara state university

Summary: The article analyzes scientific views on the management of agroclusters and identifies the features of its development. In particular, an improved definition of the economic category of an agrocluster has been developed.

Keywords: cluster, agrocluster, management, cluster management, competitiveness, global competitiveness, specialization, integration, food security, agriculture

Increasing competition in the world market is becoming more and more important for the implementation of reforms aimed at sustainable development of the national economy of countries. In particular, providing the population of the country with quality and affordable food products, achieving national food security is one of the main goals of the socio-economic policy of any country. According to the results of studies carried out by experts of the United Nations (UN) Food and Agriculture Organization (FAO), today more than 38.2 million people in the world are undernourished. If reforms are not developed and put into practice, it is predicted that their number may exceed 80.0 million in the coming years. This situation reinforces the need to implement modern methods of agricultural management in the practice of any country.

Stages of development of scientific-theoretical views on the organization and management of agroclusters, increasing the efficiency of using innovative projects in the management of agroclusters and factors affecting it, priorities for improving the methodological foundations of agrocluster management, far abroad R. Claudio, R.G. Cooper, M. Delgado, D. Doloreux, I. Laure, G. It is reflected in the scientific research of economists like Linden.

According to the analysis of world practice, countries with agro-cluster management practices have been achieving effective results compared to other countries in terms of increasing production efficiency in agriculture, including strengthening the position of countries in global competition by introducing innovative projects in the field. Together with this, we will be able to observe that in the practice of the countries that are members of the World Trade Organization or are becoming members of it, they have switched to the agrocluster approach in increasing the efficiency of agriculture.

In the economic literature, scientific research on the role of cluster management in the national economy, its importance in the formation of various inter-sectoral complexes, including the expansion of the possibilities of innovative development of agriculture based on agro-cluster management, has been carried out since the 70-80s of the XX century [1]. In 1990-2000, the rapid changes in global economic relations in the world, the increase in the desire of countries for innovative development, led to the increasing specialization of agrocluster management practices in the agriculture of advanced and rapidly developing countries [2]. As a result, agrocluster management began to be evaluated in the economic literature as an innovative management method that allows to achieve high efficiency by deepening the integrated relations in the innovative management of agriculture.

The level of global competitiveness of national agriculture in the practice of developed countries such as the USA, Germany, France, Finland, Austria, the Netherlands, including developing countries such as China, Malaysia, Indonesia, India, and developing countries such as

Russia, Ukraine, Kazakhstan, Hungary, Slovenia it is planned to use the agrocluster management methodology in the increase. According to the results of studies conducted by experts of the UN Food and Agriculture Organization, today more than 50.0% of the world's countries are widely using agrocluster management practices to increase the competitiveness of agriculture, ensure national food security, and ensure the sustainable development of the sector [3].

Taking into account the above, it can be concluded that the transition to agro-cluster management practice in the quality improvement of the produced food products is the need of the hour for sustainable development of agriculture in our country, improvement of its global competitiveness indicators, improvement of efficiency of introduction of innovations in the sector. In this case, in-depth research of scientific studies on the formation and development of the cluster approach in economic literature is required.

In order to understand the essence of the practice of agrocluster management of agriculture, it is necessary to analyze its basis first. In general, agrocluster management is formed in connection with the term "cluster". The origin of the term cluster is derived from the English word "cluster", which lexically means the combination of various interrelated and related elements, their gathering at one point (or place)[4]. Together with this, it also refers to different groups with a certain level of common characteristics.

In the field of science, the term "cluster" was first used in the exact and natural sciences, and entered the economic literature from the 70s of the 20th century. Swedish economists K. Fredrickson and L. Territorial studies carried out by the Lindmarks became important. In the process of research, these scientists analyzed the activities of various enterprises located in the same region, established mutual economic relations, i.e. organized mutual cooperation between various enterprises in the production of one type of product, and used the term cluster to evaluate the overall result of their activities [6]. This prompted the formation of a cluster approach in the economic literature.

Also B. Johnson and B. In Laundvall's research, there are also calculated scientific views related to the theory of cluster management. In the concept of "development blocks" developed by them, there are scientific views that ensuring the interdependence between the activities of regional production associations (associations) and the activities of institutions providing educational services expands the possibilities of sustainable development of the national economy and increasing competitiveness at the global level. [7]

By the 80s of the 20th century, M. In the studies carried out by Porter, an attempt was made to shed light on the essence of the term cluster as an economic category. In his opinion, "a cluster is a manifestation of the inter-sectoral integration of economic activities of enterprises, organizations and institutions located in a certain field, geographically in the same area." In this approach, we can see that cluster management is based on deep integrated relations between different enterprises and organizations involved in the production of one type of product.

M. Porter's research is characterized by the fact that he summarized the advantages of scientific views on integrative relations in previous studies and evaluated them as characteristics of cluster management. Also, when the scientist studied the development characteristics of the national economy of 10 leading countries in the world, it was determined that clustering increases the efficiency of using national competitive advantages and is a process that guarantees the development of the country's economy [8].

Another local economist Q. In his research, Mamadaliev puts forward the idea that "a cluster represents a set of economic structures localized in itself." In this tariff, priority is given to the improvement of the effectiveness of the localization programs implemented through the development

of agroclusters. This approach is presented above in Ch. According to Muradov, it means that the characteristics characteristic of agroclusters are manifested in agrocluster management.

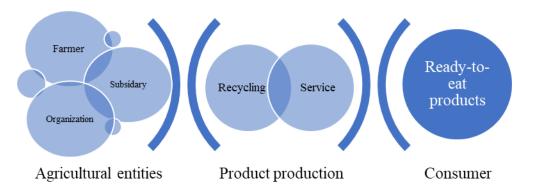


Figure 1. Technological chain of agrocluster activity management

Based on the systematic analysis of the scientific views related to the field of agrocluster management in the economic literature, it was concluded that the management of agriculture based on the cluster approach is manifested by the formation of a technological chain in the order presented



in Figure 1.

Figure 2. Structural structure of modern agroclusters in agriculture

The technological chain of the management of the developed agroclusters is characterized by the fact that it includes the period from the cultivation of agricultural products to its processing in industrial sectors, together with services such as storage, delivery, packaging of the grown product, until it reaches the consumer. At this point, it is worth noting that this technological chain, incorporating the product production cycle in the activity of the agrocluster, has the characteristic of constant repetition [9].

It was concluded that the organization of agroclusters in agriculture increases the competitiveness of the sector at the global level, expands the possibility of ensuring national food security, and ensures the efficiency of innovative development.

Based on the analysis of scientific and theoretical views on the development of agrocluster management in the development of agriculture, it was determined that there are the following features characteristic of its manifestation:

- geographical location of enterprises and organizations included in the agrocluster in one area;

- strengthening of intersectoral integration relations for the creation of a certain type of product;

- increase the efficiency of localization programs;

- improvement of the competitiveness of the products produced by the agrocluster;

- equal consideration of the interests of enterprises and organizations that are part of the agrocluster when making management decisions;

- a sharp increase in the level of innovative activity of the field where the agrocluster is established;

- high level of capitalization of agroclusters;

- breadth of financial opportunities;

- access to international markets, including increased opportunities to enter new markets, etc.

Based on the analysis of the scientific-theoretical views aimed at the organization and management of agroclusters in the economic literature, an author's tariff was developed for it. In our opinion, agroclusters are agricultural production and processing industries, scientific research institutes, financial organizations, state management bodies, public organizations, agricultural and industrial service enterprises, local and foreign investors is a form of regional joint economic management consisting of a complex of various enterprises and organizations for the production of a certain type of product. Agrocluster management of agriculture is reflected in the adoption of decisions on economic activity based on the common interests of the constituent enterprises that are members of it. At the same time, agrocluster management expands the possibilities of increasing the level of innovative activity in agriculture.

In general, the transition to management practices based on the agrocluster approach in the development of agriculture creates a basis for the effective use of the potential of agricultural development in the context of increasingly complex economic relations at the national and global levels.

REFERENCES

1. Фалькович Е.Б., Котляров Д.А. Аграрный кластер как инновационное направление интеграции в АПК стран таможенного союза и Единого экономического пространства // Вестник университета кооперации, экономики и права. 2014. № 1 (49). с. 340-346

2. Клейнер Г.Б., Качалов Р.М., Нагрудная Н.Б. Синтез стратегии кластера на основе системноинтегрированной теории // Отраслевые рынки. 2008. № 5-6 (18) с. 31

3. Фалькович Е.Б. Теоретические аспекты кластеризации аграрной сферы. // Вестник Тамбовского университета. Серия. Гуманитарные науки. 2014. № 5 (133). с. 73-79

4. Муродов Ч., Хасанов Ш., Муродова М. Агрокластер: ташкил этишнинг назарий асослари. // Иқтисод ва молия илмий журнали. 2014. № 2. 19-25 бетлар.

5. Саидахмедов У. Кластер назарияси ва унга амалий ёндашувлар. Жамият ва инновациялар – Общество и инновации – Society and innovations. Issue – 4 № 2 (2023). 51-56 бетлар.

6. Портер М. Международная конкуренция: пер. с англ. / под ред. и предисл. В. Щетинина. М., 2006. 980 с.

7. Galvez-Nogales, Eva. Agro-based clusters in developing countries: staying competitive in a globalized economy. Agricultural Management, Marketing and Finance Occasional Paper № 25. Food and Agriculture Organization of The United Nations (FAO). Rome, 2010. 105 p. URL: <u>https://www.fao.org/3/i1560e/i1560e.pdf</u>

8. Нурымбетов, Т. У. (2017). Диверсификация производственной деятельности в сельском хозяйстве и методологический подход к оценке ее уровня. Theoretical & Applied Science, (10), 77-82.

9. Timur, N., Ganiybay, D., Quanishbay, U., Kuanishbay, K., & Sarsengaliy, B. (2020). Prospects For Private-Public Partnership In The Development Of The Innovation Sphere In Uzbekistan. International Journal of Future Generation Communication and Networking, 13(4), 1881-1886.

Rezyume: Maqolada agroklasterlarni boshqarish boʻyicha ilmiy qarashlar tahlil qilingan va uning rivojlanish xususiyatlari aniqlangan. Xususan, agroklasterning iqtisodiy toifasining takomillashtirilgan ta'rifi ishlab chiqildi.

Резюме: В статье анализируются научные взгляды на управление агрокластерами и выявляются особенности его развития. В частности, разработано уточненное определение экономической категории агрокластера.

Kalit so'zlar: klaster, agroklaster, menejment, klaster boshqaruvi, raqobatbardoshlik, global raqobatbardoshlik, ixtisoslashuv, integratsiya, oziq-ovqat xavfsizligi, qishloq xo'jaligi

Ключевые слова: кластер, агрокластер, менеджмент, кластерное управление, конкурентоспособность, глобальная конкурентоспособность, специализация, интеграция, продовольственная безопасность, сельское хозяйство.