## ACTIVITIES OF THE SCIENTIFIC FIELD AND SCHOOLS IN KARAKALPAKSTAN IN THE MIDDLE OF THE 20TH CENTURY

I .G. Elmuratov Karakalpak State University Associate Professor E-mail:elmuratov.ikmet@mail.ru

## Abstract:

This article provides information on the development of science in Karakalpakstan, the number of scientific employees and scientific-pedagogical personnel, professors and teachers of the Pedagogical Institute, the establishment of the Karakalpak Scientific Research Institute, and the state of formation of scientific schools in social fields along with natural sciences.

Keywords: Academy of Sciences, Science, Scientific School, Research Institute, Scientific staff.

The development of science in Karakalpakstan has followed a complicated path. Initial successes were achieved during the years of former Soviet power. If previously the industrial sectors in the territory of Karakalpakstan were at a low level, by 1930 the gross industrial output increased more than 130 times compared to 1913. The cultivation of cotton, the main agricultural crop of the republic, increased 50 times in 1960 compared to 1913. Several times, the continuous development of the national economy has led to the regular growth of the population's material well-being and the rapid development of culture.

In fact, some sources indicate that before the revolution, Karakalpakstan was a completely illiterate country. In fact, it should be noted that the development of the first madrasahs and religious schools began much earlier in Karakalpakstan.

In the 1950s and 1960s, the network of schools, libraries, clubs, cinemas and polyclinics was well developed in the republic. In 1960 alone, the number of students increased from 92,000 to 98,000: 6 boarding schools and 25 comprehensive schools with industrial education were opened. The republic had 8 technical schools, a pedagogical institute, the Karakalpakstan department of the USSR Academy of Sciences, an agricultural research institute and a number of other scientific research institutions.

The policy carried out in the republic created all the opportunities for the development of science and higher education. In this process, the main tasks before the employees of science and higher educational institutions were to form and expand the specializations of agrobiology, primary education, foreign language, physical education, basics of agriculture, basics of industrial production. In 1950, the number of students of the Pedagogical Institute was only 863, in 1955, it increased to 1,035, and in 1961, it increased to 1,472, including part-time students, to more than 3,000. Accordingly, the number of scientific staff and scientific-pedagogical personnel in the republic increased. If in 1955 the professors and teachers of the Pedagogical Institute consisted of 112 people and only 44 scientists worked in the republic, in 1961 these figures increased to 142 and 190 people, respectively. Thus, by 1960, 332 scientific and scientific-pedagogical workers were working effectively. In recent years, the increase in the number of highly qualified personnel has been particularly significant. So, in 1940, 1 candidate of science, in 1950, 5 candidates of science worked in the republic, and in 1961, the number of highly qualified workers was 46, of which 44 were candidates of science and 2 were doctors of science. In

addition, many scientific, production and research organizations sent by sister republics to help in the study and development of natural resources have been operating in Karakalpakstan.

In order to expand the network of scientific institutions and significantly increase scientific research, active research has been started in the field of science that did not exist before. New directions that ensure the further development of science and culture and, accordingly, the productive forces of the republic have also developed. A plan was developed to bring successful scientific research topics closer to industrial needs in the national economy.

The establishment of botanical sectors, a botanical garden, a laboratory of land vertebrates, a laboratory of ichthyology and hydrobiology, parasitology, microbiology, chemistry and building materials within the branch of the Academy of Sciences of the Uzbek SSR made it possible to start scientific research works.

The establishment of the Karakalpak Research Institute was intended to ensure the development and introduction of agricultural production. Botanists and chemists of the Republic, in cooperation with the "Agrolestroye" expedition, studied the vast reed fields in the lower reaches of the Amudarya and made recommendations on creating a general scheme for their industrial use. Based on this, relevant organizations began designing the Kayldjar cardboard-pulp plant. In addition, the comprehensive study of plant resources of the Ustyurt plateau allows to include this vast area in the field of economic use. In order to enrich the flora of Karakalpakstan, the foundation was laid for carrying out scientific work in the botanical garden.

It should be noted that in the region new useful plants, zoologists began to study the ecology and biology of terrestrial and aquatic fauna. This made it possible to develop the most reasonable ways of using it in the national economy. Ichthyologists and parasitologists of the branch took part in the development of a scheme of fishery activities to increase the fish stocks of the Aral Sea. The study of the parasitic fauna of some commercial fishes of the Arol, Amudarya and Tashkent reservoirs was completed.

In-depth scientific research of ungulates has been started, paying attention to the study and breeding of fur-bearing animals of the republic, as well as the development of fur trade in the future. A group of biologists of the branch, the Pedagogical Institute, the Agricultural Institutes coordinated the passporting of water bodies in the lower reaches of the Amudarya, and developed measures for their rational use.

A number of cotton varieties were grown by breeders of the Institute of Agriculture, of which the A-150 and KK-1998 varieties were considered to be promising for the northern regions of the republic. In order to create a new type of vegetable and fruit crops, fruitful varieties of melon, mash, corn, barley, strawberry and several other crops were grown. Certain works are also being carried out on the provision of hybrid seeds to seed production and the economy of the republic, and their wide spread throughout the republic.

In fact, along with natural sciences, social fields were also developing in the region. Historians, philologists, and art historians of the republic made a great contribution to the development of the culture of the Karakalpak people. Historians worked on creating a fundamental work - "Essays on the history of the Karakalpakstan ASSR from ancient times to the present day". Linguists worked on the creation of a scientific grammar of the modern Karakalpak language, which will be a guide for students of the Pedagogical Institute and teachers of the native language, and created a number of words. The

## NOVATEUR PUBLICATIONS JournalNX- A Multidisciplinary Peer Reviewed Journal ISSN No: 2581 - 4230 VOLUME 9, ISSUE 5, May -2023

study of the dialect and its characteristic features and history of the Karakalpak language has begun. Literary scholars of Karakalpak made a significant contribution to science. Scientists-linguists, literary experts have carried out extensive work in the field of creation of textbooks, methodological manuals for republican schools and other educational institutions on Karakalpak language and literature, Russian language. In this case, S. Akhmetov, K. Berdimuratov, Esemuratov, K. Ubaydullaev, A. Qdirbayev, P. Senin, A. Scientific research was conducted with the participation of scientists such as Jaksiboev and D. Nasirov. As a positive phenomenon, it should be noted that the study of the rich and unique art of the Karakalpak people was organized within the art history sector.

As a result of scientific research conducted in various fields of science, scientists of the republic have prepared several monographic works that serve further development of science and culture in the following years. These works include: Essays on the history of Karakalpakstan in 1917-1927 by Ya.M.Dosumov; Fergana valley blackbirds" - A. S. Tolstov; Essays on the history of Karakalpak literature before the revolution" - N. Daukaraev; Karakalpak Soviet poetry before the Great Patriotic War S. Akhmetova; Essays on the history of public education and schools of Karakalpak -J Urumbayev; The name of the plants of the Zarafshan river and ways of its reconstruction V. V. Sedov: Essays on the history of the culture of the Karakalpakstan ASSR - U. Shalekenova; Deformation of irrigation channel layers in light soils A. Nurmanov; Berdak's life and work" - I. T. Sagitov; "Karakalpak-Russian dictionary" - prof. Baskakov N. Scientific works edited by A. and a number of scientists have been published.

The publication of the first scientific journal "Vestnik" of the Karakalpak branch of the Academy of Sciences of the UzSSR was a big and important event in the scientific life of the republic. To this day, a large number of scientific articles and scientific news are published in this journal. This publication allows to publish the results of scientific researches, to make them available to a wide readership and helps to introduce scientific achievements into production.

Scientific personnel and scientific schools play a decisive role in the development of science. In 1960-1965, significant work was carried out in the direction of training of scientific staff and improvement of their qualifications. At this time, 14 people studied at targeted full-time and part-time post-graduate courses in agricultural, natural, specific directions. Also, 31 people in chemical sciences, 37 people in humanitarian and economic sciences became aspirants. In this important work and in creating a school, Russian scientists S. P. Tolstov, N. A. Baskakov, T. Scientists of Uzbekistan and other bordering republics like A. Zhdanko helped a lot. In the following years, the State Pedagogical Institute, Tashkent State University, in the creation of personnel training and scientific schools, Karakalpak State Pedagogical Institute, Doctor of History Prof. G.N. They worked together with Nepesova. This situation also had a positive effect on the personnel training system.

Professional development of the institute's scientists and teachers was carried out not only by postgraduate studies, but also by sending them for long-term internships to scientific institutions and educational institutions in the central cities of the republic. Pedagogical Institute and Agricultural Scientific Research Institute paid serious attention to this issue.

## REFERENCES

- 1. Академия наук Узбекский ССР. Ташкент «Фан» 1983
- 2. ХАБАРШЫ, ВЕСТНИК. . №7 (196) Нөкис 2004 ж.

 Oʻzbekiston Kompartiyasi Qoraqalpogʻiston viloyat qoʻmitasi kotibi M. Nurmuhamedovning Olimlar va Qoraqalpogʻiston universitetining respublika yigʻilishida oʻqilgan ma'ruzasi (1962 yil 13 yanvar).
Вестник. Хабаршы. Каракалпакского филиал Академия наук Узбекский ССР. №1(7) 1962 г