

The Formation of the First Scientific Research Institutions in History

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Abstract: This article analyzes the activities of the first scientific research institutions in Uzbekistan in the 20th century. As is known from history, the emergence of scientific research and scientific research institutions in various fields of science, in particular, the emergence of the first scientific research base in the field of history, is considered.

Keywords: historical event, methodological literature, social structures, historian, Academic Center, Uzbek State Scientific Research Institute, Central Asian State University.



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INTRODUCTION

The influence of history on society is incomparable. Its precise definition, created by the people, in our opinion, requires some correction. Since history concerns absolutely all aspects of human life, not only the masses, but also individuals who, having gained leadership, have a strong influence on political processes and, as a result, history itself, participate in its creation. As is known, technological discoveries that often change world geopolitics also lead to sharp turns in historical events. However, one of the main components of history is public consciousness.

The emergence of the first academic scientific research institutions in the recent history of Uzbekistan occurred in the mid-20s of the 20th century. In 1925, the Academic Center was established under the People's Commissariat of Education of the Uzbek SSR, which consisted of three departments: scientific-pedagogical and musical ethnographic, Uzbek studies, scientific organizations and societies. This institution was established to replace the commissions operating under the State Scientific Council. The list of non-staff employees of the Uzbek Academic Center includes the names of the most prominent national intellectuals of the Uzbek people, including Abdumo'min Sattoriy, Hoji Muin Shukrullaev, Ghozi Olim Yunusov, Abdumusavvar Odilov, Abdulhamid Sulaymon (Cholpon), Abdurauf Fitrat, Vadud Mahmud, Sadridin Ainiy.

Thanks to the scientific and practical efforts of these intellectuals, the center has carried out many positive works. In particular, the scientific and pedagogical department worked on the development of new curricula and programs for various educational institutions, the compilation of textbooks for them, and the control of textbooks and methodological literature published in Uzbekistan, while the Uzbek Studies Department worked on the comprehensive study of the past, language, and lifestyle of the Uzbek people. It was also engaged in reviewing all materials

published in Uzbek in Uzbekistan by language. For example, from November 1924 to March 1925, this department prepared nine textbooks for printing for the first stage of Uzbek schools¹.

The thinking of people in society consists of many elements: views, ideas that have existed in history and are historical, political, economic and cultural theories, therefore it cannot be abstracted from history in any way. History has always served as an argument in the construction of the state and nation. Especially in times of crisis in the political situation and socio-economic development of states, there was a need to turn to history to determine their place in the world system. Each era and state had its own level of historical generalizations that corresponded to ideas about social development. However, it is undeniable that ideological borrowings helped "to build life, fill it with a sense of its significance, to determine the place and role of the country in the modern world, the place and role of power in the social system".

DISCUSSION

As researcher O. Shutova notes, today "a whole generation of historians has grown up, preferring to work in the field of "applied" research, not trusting various "explanatory models", "global schemes" and other metatheoretical temptations. gaps and "blind spots" are peculiar to "history". It is noteworthy that in such a general stream of historical research, research is becoming more and more noticeable and influential, giving way to a completely new direction - intellectual history. According to S. Zenkin, intellectual history deals not only with abstract ideas, but also with more specific objects - the institutions that organize the life and activities of intellectuals, and the intellectuals themselves, including random biographical facts of their lives. These two aspects of intellectual history inevitably coexist².

The Department of Scientific Organizations and Societies had the State Library in Tashkent and the Committees for the Preservation of Uzbek Art and Historical Monuments under its direct control. The Department ideologically guided the scientific research work of all scientific organizations and societies in Uzbekistan. At the same time, on December 6, 1925, by the decision of the Academic Center Board, work was also carried out to create special storage facilities for oriental manuscripts in Samarkand. It is worth noting that the Academic Center was recognized as an institution that made a significant contribution to the development of cultural, historical and oriental studies in its time.

ANALYSIS AND RESULTS

A number of scientific research institutes were established in Uzbekistan during this period. Among the scientific institutions were the Uzbek State Scientific Research Institute (UzNII), the All-Union Scientific Research Institute of Cotton Growing (Soyuz NIXI), etc. At the Central Asian State University (SAGU), which united large scientific forces, the natural resources of Uzbekistan, climate and soil characteristics, fauna and flora began to be widely studied. During this period, a lot of work was also carried out in geological exploration, in particular, dozens of oil fields were discovered. In 1927, a powerful oil reserve was discovered in the Shorsuv oil basin. Raw material reserves for cement production were searched for and found, and on their basis the Khilkovo cement plant was expanded, and the Kuvasoy cement plant was completed. In addition, deposits of rare metals, tin, copper, gold, and marble were discovered. Of course, this enriched the industrial infrastructure of Uzbekistan, but at the same time, it laid the foundation for its transformation into a raw material base for the entire Soviet Union. By the beginning of the 1930s, the number of scientific research institutes in Uzbekistan began to increase sharply. If in

¹ Axunova M.A., Lunin B.V. Istoriya istoricheskoy nauki v Uzbekistane. Kratkiy ocherk. – Tashkent, 1970. – S. 57.

² <http://uzhistory.uz/Novosti/Ekspertnoe-soveshanie-6.12.18>.

1932 32 scientific research institutions were established in Uzbekistan, in 1939 their number reached³.

In order to coordinate the activities of all scientific research institutes and institutions in the republic, on October 11, 1932, the Scientific Committee was established under the Central Executive Committee of the Uzbek SSR. The Scientific Committee included the Tashkent Observatory, the Kitab Astronomical Latitude Station, the Samarkand Seismic Station, the Heliochemical Laboratory, the Committee for the Preservation of Museums and Monuments, the State People's Library, the Zoological Garden, and the Book Chamber. They carried out scientific research in various areas of theoretical and applied science. As is known, the history of Uzbekistan is a product of the policy of the Soviet state. In the 40s-50s of the 20th century, the writing of a "national" history began on the instructions of I.V. Stalin. Historians were required to write a "national" history in an international spirit based on the idea of "friendship of peoples". However, the Uzbek SSR lacked a cadre of historians and the number of scientific research institutes was small. The history faculty of the Central Asian State University (SAGU) was opened in 1935 and was mainly attended by Russian-speaking students. The policy of repression in 1937-1939 crushed the Uzbek intelligentsia. Among them were the professor of history Polat Soliev and the linguist and historian Abdurauf Fitrat⁴. On January 9, 1940, the Science Committee was transformed into the Uzbek branch of the USSR Academy of Sciences⁵.

From the very first days of the Second World War, the rich potential of the spiritual culture of the peoples of Uzbekistan was mobilized for the speedy defeat of fascism, the worst enemy of humanity. All areas of Uzbek culture, thanks to the dedication and patriotism of its figures and employees, were directed in a very short time to the needs and requirements of the war. The general coordination of scientific research work was carried out by the Uzbek branch of the USSR Academy of Sciences (UzFAN), established in January 1940. By the beginning of the war, the Uzbek branch of the USSR Academy of Sciences included the Institutes of Geology, Energy, Chemistry, the Institute of Botany and Soil Science, the Institute of Language, Literature and History, the Bureau of Economic Research, the Physics and Mathematics Sector and other scientific units. In November 1943, the Academy of Sciences of the Uzbek SSR was established on the basis of UzFAN. In 1944, the academy had 818 scientific and scientific-technical employees. A large contingent of scientists also worked in the higher education system. Along with their pedagogical activities, they were also engaged in productive creative research⁶.

One of the main directions of the activity of Uzbek scientists was to participate in the reconstruction of the economy in the post-war period, to study and master local raw materials of defense importance, to search for and use new resources, to provide practical, scientific and technical assistance to enterprises and agricultural holdings. For example, employees of the Central Asian Industrial Institute and SAGU (Central Asian State University) conducted research on the active use of Angren coal, rubber plants and alinuts. Scientists of agricultural institutes developed methods for increasing productivity and introducing new agricultural crops, and increasing livestock production.

Chemists found ways to replace rare materials and produce valuable products from various wastes. For example, at the suggestion of Academician O.S. Sodikov and the group he led, milk casein was replaced with proteins obtained from seed coir, and sulfate alkali used in the foundry industry was replaced with protein glue obtained from cottonseed coir, which allowed saving 2.5 million rubles per year. At the same time, new methods were developed for obtaining coal

³ Abdullaev X.M. 40 let sovetskoy nauki v Uzbekistane. – Tashkent, 1958. – S. 41.

⁴ O nekotorykh voprosakh istorii narodov Sredney Azii // Voprosy istorii. – 1951. – № 4. S. 3–4.

⁵ Akademiya nauk v intellektualnoy istorii Uzbekistana. – Tashkent, 2012. – S. 36.

⁶ O'zbekiston tarixi (1917-1991 yillar). K. 2. O'zbekiston 1939-1991 yillarda. – Toshkent: O'zbekiston. NMIU, 2019. – B. 246.

briquettes as a result of dry processing of ethyl alcohol, acetic acid and cane. Under the leadership of Academician S.Yu. Yunusov, great work was carried out to study the alkaloid properties of Uzbek plants⁷.

Geologists of Uzbekistan intensified the search for minerals to provide the industry with the necessary raw materials. In 1943 alone, 35 geological expeditions worked in the mountains and deserts of Uzbekistan³. The republic's botanists discovered rich forests of wild rubber plants, developed methods for obtaining vitamins from alfalfa and rice waste, and summarized and published materials on plant raw materials that opened up broad prospects for the development of light industry. Work in the field of pharmaceutical production was of great importance. The chemistry faculty of SAGU launched the production of anesthetic ether, calcium chloride, caffeine, streptacid, sulfidine, and nicotinic acid, which were necessary for wartime medicine. Employees of the Tashkent Pharmaceutical Institute commissioned the production of 15 new drugs from local raw materials.

Scientists in the field of metallurgy and mechanical engineering achieved great success. They worked on the creation of the metallurgical base of Uzbekistan, introduced foundry production and much cheaper methods of metal processing. The developments they carried out allowed for the smelting of high-quality pig iron in a new way, etc⁸.

Research conducted under the leadership of T.A. Sarimsakov, V.I. Romanovsky, M. Kamolov, N.N. Nazarov and other scientists made a significant contribution to solving important problems related to improving the quality of ammunition, military equipment, and the development of domestic aviation. In particular, the creative research of Uzbek scientists in the fields of probability theory and mathematical statistics made it possible to increase the accuracy of artillery shells and bombs, the carrying capacity of combat aircraft, and improve the quality indicators of military equipment produced in the republic.

The political leadership of the central government mobilized all sectors of the national economy, even science, to strengthen and improve the authoritarian Soviet system. Just as the Union national economy set a separate task for all national republics, the science of each republic was given separate directions, which arose from the task of the republic at the Union level. In particular, the Academy of Sciences of the Uzbek SSR was tasked with solving important and urgent problems of agricultural sectors, first of all, increasing the productivity of cotton growing, its mechanization, improving the agrotechnics of cotton growing, seed production, improving the breed of livestock, and rational use of water resources. Scientists of the republic were engaged in the development of more than 230 topics of great importance for the national economy. Work was also launched to introduce scientific and technical achievements into industrial and agricultural production. For example, an automatic machine invented by employees of the Scientific Research Institute of the Silk Industry, which accelerates the extraction of silk from cocoons, was mastered in a short time and put into production. On this basis, the task of replacing manual labor used in extracting silk from cocoons with a machine was solved by Uzbek scientists for the first time in the world.

In the 1950s and 1960s, large scientific institutions were established in Uzbekistan, such as the Institutes of Nuclear Physics, Chemistry, Plant Raw Materials and Cotton, Water Problems and Hydraulic Engineering, Oil and Gas, Local Medicine, Astronomy, Biochemistry, Cybernetics, Electrical Engineering, Seismology, Philosophy and Law, Art History, Archeology, and the Karakalpakstan Complex Scientific Research Institute. In 1959, the first atomic reactor was launched in Uzbekistan¹. Along with scientific research, these institutes also trained scientific personnel. Scientific personnel were trained mainly through postgraduate studies. The number of

⁷ Nauka v Uzbekistane. Obshchestvennye nauki. Tom I. T., 1974. – C. 408.

⁸ O'zbekistonning yangi tarixi. 2-kitob. O'zbekiston sovet mustamlakachiligi davrida. –B. 488.

postgraduates increased from year to year. In the Academy of Sciences alone, their number was 370 in 1958, and by 1973 it had reached 839 people. However, the training of doctors of science, as a result of the abolition of the doctoral system in the republic in 1956, created serious difficulties in training highly qualified scientific personnel⁹.

A prominent figure in Uzbek science, Habib Abdullaev, during his leadership of the academy, paid great attention to the issue of local personnel. On his initiative, a department for the training and distribution of scientific personnel was established at the academy. The number of places for postgraduate studies was 43 in 1952, and in 1960 it was increased to 400. The nomenclature of specialties was increased from 27 to 97. The scientist was able to foresee the future of the Academy of Sciences of Uzbekistan¹⁰.

In connection with the re-establishment of the practice of training postgraduates in large scientific research centers in the central cities of the former Soviet Union, 62 representatives of the local nationality were sent on business trips in 1957, a total of 83 Uzbeks in 1958, and 65 postgraduates to higher educational institutions in Moscow and Leningrad. In 1959, documents from the Central Archive of the Academy of Sciences indicate that 231 (150 in total) postgraduates improved their skills in Ukraine and other republics of the Union. By March 1960, 242 Uzbeks had been sent on business trips. Continuously growing and highly qualified scientific personnel played an important role in finding quick and correct solutions to the problems of national economy and cultural construction. The acquisition of state sovereignty by Uzbekistan in 1991 was a new and most important stage in the history of the National Academy of Sciences. Within the framework of the state scientific and technical policy developed and implemented by the leadership of Uzbekistan, priority attention was paid to the reform of the National Academy of Sciences as a leading center of scientific research and a generator of innovative intellectual products. As a result of such events, it became possible to eliminate a number of systemic problems inherited from the former Soviet system of organizing scientific research activities, as well as those arising from the “transitional” stage of the socio-political and economic life of Uzbekistan. republic. In addition, the structure and management apparatus of the Academy of Sciences were modernized, the procedure and mechanisms for making and implementing administrative and management decisions were significantly democratized; Regular monitoring of the effectiveness of the activities of research institutes of the Academy of Sciences has been established, the system of providing grant funds for scientific projects within the framework of state scientific and technical programs on a competitive basis has been improved, a number of research structures have been formed that have contributed to increasing the effectiveness of the activities of research institutes. activation of research and development and attraction of intellectual potential to them in the regions of the republic.

CONCLUSION

At the same time, the economic development of the Republic of Uzbekistan, the processes of globalization are setting new tasks and objectives for the National Academy of Sciences. Its almost 70-year history, represented by unique scientific discoveries, including discoveries of international importance, its activities in the complex and conflicting stages of Soviet history, the path of renewal and modernization during the years of Uzbekistan's independence are the objects of historical research.

In conclusion, despite the war years, it was precisely these years that a fundamental turning point and changes in the history of science in Uzbekistan occurred. The formation of the Academy of Sciences of Uzbekistan served as the basis for science in the republic and its development in various directions. Various branch institutes of the Academy were established throughout the

⁹ Akademiya nauk v intellektualnoy istorii Uzbekistana. – S. 124.

¹⁰ Qahhorov A., G'afforova M. Habib Muhammedovich Abdullaev. – Toshkent: O'zbekiston, 1981. – B. 45

republic, and the process of training thousands of specialists in science began. Scientists focused their tasks and work on the development of science at the Academy of Sciences of Uzbekistan. Scientists paid special attention to expanding and activating the scope of the Academy's activities. New scientific directions and fields were opened within the Academy of Sciences. They personally showed great enthusiasm in the organization of scientific research institutes.

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