The role of agricultural economists in study on problems related to regional food safety

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Abstract. The beginning of the agricultural and economic science foundation in historical aspect is studied in the article. The stages of its formation and development in the Republic of Sakha (Yakutia) are reviewed. The paper presents some well-known scientists-agricultural economists who have made a significant contribution to the science and education of the Republic. A brief overview of their researches is shown. The article focuses on the need for enhanced capacity-building for the activity of regional economic research. Particularly, it is necessary to significantly enhance the intellectual potential of scientists in terms of selecting and evaluating priority areas of social and economic researches on the AIC development, including food safety governance. The study highlights that agricultural science plays an important role in solving the main tasks of providing food safety. The authors concluded that it is necessary to sustain regional science aimed at creating a local food base in the Far North.

1 Introduction

Solving complex problems of AIC development is impossible without extensive academic researches and reliable scientific support. It is important to understand that sustainable development of the agrofood complex and food safety can be reached based only on a new paradigm of scientific and technological development on the ground of a new knowledge, innovative and socially responsible economy [9]. Thus, scientific institutions of agroeconomic profile need to continue research on the agriculture development, providing the necessary level of its profitability, transforming the industry into a knowledge-consumptive and high-tech economy sector, reducing intersectoral disparities, reducing significant regional differences in social and economic development of the village.

2 Materials and methods

In recent decades, the development issues of social and economic systems of the region have been in the main focus of a significant number of scientists and researchers. The

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theoretical and methodological basis of regional economic research in the country are the works of such scientists as Abalkin L. I., Altukhov A. I., Granberg A. G., Glazyev S. Yu., Minakir P. A., Petrakov N. Ya., Ushachev I. and others. General scientific research methods were used in the research process.

3 Results and discussion

Since its formation in 70 years, the agricultural and economic science of the Republic has endured several stages of formation and development:

The 1950s and 1960s of the last century: the organization of research and generalization of agricultural science achievements into production; recommendations for reinstatement of the rural economy after the war; the development of agriculture and fodder cropping in collective farms that ensure stable yields in extreme climate conditions. Participation in the fundamental work “Scientific-based development and deployment of productive forces of the Northern zone for the period of 1971-1980”.

The 1970s and 1980s: creation of the “Development of local food facility in the areas of commercial exploitation of the Far North and the BAM zone”; “General scheme of development and placement of agriculture of the YASSR up to 2000”; “Market forecast of agricultural products of the Republic, improvement of multiregion food relations”, as well as “System of subsistence agriculture of Yakutia”, etc.

The 1990s and 2020s: studying the problems of regional food safety, providing a comprehensive social and economic development of rural uluses; the development of family economy and cooperative relations, as well as agricultural transformations in the conditions of market relations and the formation of effective management systems.

More than 300 monographs have been prepared and published: “Severnoye Selo” (1996), “Agricultural reform in the Republic of Sakha (Yakutya): economy, experience and market” (1997); “Farms of Yakutya” (1999); “Fundamentals of cooperation development” (2000), “Family economy in Yakutya” (2003); “Food safety of Yakutya” (2007); “Agricultural economy of the North” (2008); “Agricultural settlement in the North” (2014); “Food safety of Yakutiya” (2016), “Social and economic safety of the regions of the North” (2019), etc.

More important scientists-agricultural economists who have made a significant contribution to science and education should be mentioned. In fact, this is a message to young people, passing a certain conditional baton. It is implicit that some veterans have retired from the most active work, and some are no longer alive.

Mikhail Fedorovic Gabyshev, Doctor of Sciences degree in Economics, Professor, Director of the Belarusian Research Institute of Animal Husbandry of the Academy of Sciences of the BSSR, made a significant contribution to the work of the Department of Economics at Yakut Subdivision of the Siberian Branch of the Academy of Sciences of the USSR. In 1945-1947, he conducted an expedition to study the horse breeding of Yakutiya, which resulted in the creation of major monographic works such as “Yakut horse breeding: economy and organization of herd horse breeding in the Yakut Autonomous Soviet Socialist Republic” and “Fodder herbs of Yakutiya”. These books have already become bestsellers and indispensable guides for many generations of scientists, practitioners, and students.

Avdeev Ivan Petrovich, Candidate of Sciences degree in Economics, honored worker of Science of Yakut Autonomous Soviet Socialist Republic. In 1959-1960 he was a director of the M.G. Safronov Yakut Scientific Research Institute of Agriculture. In 1960-1961 - Minister of Agriculture of Yakut Autonomous Soviet Socialist Republic. In 1962-1966 he was the Secretary of the Yakut Regional Committee of the Communist Party of the Soviet Union. In 1966-1977 he was a head of the Department of Economics of the Yakut
Subvision of the Siberian Branch of the Russian Academy of Sciences. He made a significant contribution to the development of the productive forces of the Yakut Autonomous Soviet Socialist Republic, the publication “System of agriculture in the Yakut Autonomous Soviet Socialist Republic” (1968) and was a father of the creation and organization of agricultural and economic science in the Republic.

Antipin Vasily Nikolaevich, Candidate of Sciences degree in Economics who was in 1958-1959 the director at M.G. Safronov Yakut Scientific Research Institute of Agriculture. In 1960-1963 he was a head of the Department of Economics. In 1964-1983 he was a deputy chairman of the Presidium of the Yakut Subvision of the Siberian Branch of the Russian Academy of Sciences of USSR. In 1981-1983 he was a sector leader of the Department of Economics at the Yakut Subvision of the Siberian Branch of the Russian Academy of Sciences of USSR. The most significant works: a new system of remuneration in collective farms, contribution to the methodology and methodology of research and planning of the population's standard of living, participation in the development of the “System of agriculture in the YASSR” (1968). Was an active member of the “Knowledge” society of Russia.

Varlamov Innokenty Fedorovich, Candidate of Sciences degree in Economics, head of the Department of Economics at Yakut Research Institute (1956-1960). In 1960 he was a head of the Department of Political Economy, dean of the Agricultural Faculty, Associate Professor of the Department of Political Economy of Yakut State University. The main area of work is the economy and organization of labor in agriculture; forms of socialist ownership and social and productive relations. He was also a father of the training of broad-based economists. He was a brilliant speaker.

Yemelyanov Semyon Ivanovich, Candidate of Sciences degree in Economics, honored worker of agriculture of the of the Sakha (Yakutia) Republic. In 1964-1988 he was a head of the Department of Economics at M.G. Safronov Yakut Scientific Research Institute of Agriculture. In 1989-2008 he was a senior researcher at the Center for economic research of agroindustrial complex of M.G. Safronov Yakut Scientific Research Institute of Agriculture. He studied the organizational and economic foundations of the system of farming; specialization and placement of agricultural production in agroindustrial zones of the Republic. Semyon Ivanovich published 160 scientific papers, including 4 monographs. He was part of the dissertation council on defense of candidate dissertations on the specialty 08.00.05, and a member of the academic council of M.G. Safronov Yakut Scientific Research Institute of Agriculture, Ministry of Agriculture of the Republic of Sakha (Yakutia). A kind-hearted person who has trained many local personnel of economists.

Matveev Ivan Afanasievich, Doctor of Sciences degree in Economics, Professor, Academician of the Academy of Sciences of the Republic of Sakha (Yakutia), International Academy of Agricultural Education, Russian Academy of Natural Sciences, honored worker of national economy of the YASSR. In 1988-1997 he was the general director of Scientific Development and Production Center "Yakut", director at M.G. Safronov Yakut Scientific Research Institute of Agriculture. In 1997-2010 he was an advisory director and head at the Center for Economic Researches of AIC M.G. Safronov Yakut Scientific Research Institute of Agriculture. The main area of work is economic and technological problems of agricultural development, enhancement, specialization, indicative planning, planning and forecasting of AIC development. About 300 scientific papers and works have been published, including 30 monographs, 19 of them co-authored.

Syrovatsky Dmitry Innokentievich, Doctor of Sciences degree in Economics, honored worker of agriculture of the YASSR. From 1969-1984, he was a senior researcher in the Department of Economics of M.G. Safronov Yakut Scientific Research Institute of Agriculture. From 1984-1991 he was a senior researcher, leader of the sector of the Institute
of Economics of Yakutsk Scientific Center SB RAS. From 1991-2000 he was a deputy science director at the Institute for Humanitarian Research and the Problems of the Indigenous Peoples of the North SB RAS. The main work direction is the organization and economy of the reindeer husbandry and fishing industries in Yakutiya; the technological standard for keeping domestic reindeer. 60 scientific papers, including 2 monographs on the problems of reindeer husbandry were published.

Tikhonov Nikolay Nikolayevich, Doctor of Sciences degree in Economics, Professor at the Academy of Architecture and Civil Engineering, International Academy of Agricultural Education, honored worker of the national economy of the YASSR. In 1959-1969 he was junior and then a senior researcher of the Department of Economics at M.G. Safronov Yakut Scientific Research Institute of Agriculture. From 1969 to 1996 - senior researcher of the economy sector; leader of the sector of social problems of the Department of Economics at the Yakut Subvision of the Siberian Branch of the Russian Academy of Sciences; head of the sector of economic and social problems of Institute of Regional Economics of the Republic of Sakha Yakutiya. From 1997 to 2007 - the head of the Department of Economics of Yakut State Agricultural Academy. From 2007 to 2018 - Professor at Financial and Economic Institute named after M.K. Amosov. More than 200 scientific works have been published. Active member of "Znanie" society of Russia.

Darbasov Vasily Romanovich, Doctor of Sciences degree in Economics, Professor, Academician of Architecture and Civil Engineering Academy and Peter's Academy of Sciences and Arts, honored scientist of the Republic of Sakha, Yakutiya, winner of the state prize of the Republic of Sakha, Yakutiya in the field of science and technology. The main area of work is the study of the organizational and economic foundations of the private sector of the branch economy; agrarian reform and state regulation of the economy of AIC; food supply of the Republic. Most significant developments: participation in the development of the “System of agriculture in the Republic of Sakha, Yakutiya” (1987; 1999; 2010); “Concept of development of agriculture in Yakutiya for 1994-1998”; “Concept of family economy development in the Republic of Sakha, Yakutiya for 2000-2004”. He is an author of more than 300 scientific papers, including 30 monographs and books. He has trained 16 doctors and candidates of economic sciences. Vasily Romanovich was a head of the Department and the Dean of the Faculty of Economics at Yakut State Agricultural Academy (1987-1994). He also works as a deputy director at Institute of Regional Economics of the North, Academy of Sciences of the Republic of Sakha (Yakutia) (1995-2014.). From 2014 to present he works as a leading research worker at the Federal Research Centre “The Yakut Scientific Centre of the Siberian Branch of the Russian Academy of Sciences”.

These are the veterans of agricultural and economic science in Yakutiya. The story about them could be continued and show many more worthy and bright images. The conclusion is the following: young people have someone to take the baton from. The new generation of economists faces difficult and challenging problems, especially for Russian science in general, and for the Northern regions in particular.

It is important to note that insufficient scientific and technological development of territories leads to the emergence of a new and extremely poor phenomenon in our country, which we call "regional peripheral economy" [3]. The consequence of its expansion is that in all Russian territories (both underdeveloped and highly developed), the growth of technological potential is slowed down, as well as the level of well-being of residents is reduced. A special effect on the change in the technological potential of regions has a decrease in their number of scientific centers and personnel engaged in research and development. In fact it is shown that there is a certain outcome of science from the regions and restraint of innovative development in them [2].
As you may know, in the Soviet Union, contrary to world experience, there was a separation of research institutions from higher education, training of specialists from researches. Division of labor, maybe, is necessary. And that is a certain advantage. In the past, when there were few universities and no major research centers, the unity of science and learning was natural. Then all the classics of Russian science were university professors. The present day, research institutions are required to implement, develop, and prepare various scientific articles, documents, and references. Nowadays, academic reform requires scientists to publish in journals indexed only in English-language databases like Web of Science and Scopus. And the university professorship, generally, is difficult to attract to research work, since it is already overloaded with teaching work. Our higher school still resembles a gymnasium, where young people are more “trained” than taught to work independently. It is also overloaded with bureaucratic reporting.

Negative phenomena, primarily related to the general situation in the country, have begun to increase in recent years. Entering to post-graduate and doctoral programs has decreased significantly. Thus, various commercial ways of obtaining funds to support science are being found. Nowadays, there is practically no Research Institute for Economics in the Republic, and the “Institute of Regional Economy of the North” once had more than a hundred known people. After its transferring to the Northeast Federal University named after M.K. Ammosov, it turned into image of a feeble department, or even an incomprehensible laboratory, with a staff of 4-5 people.

Therefore, since 2014, only the “Department of regional economic and social research” at the Federal Research Center "Yakut Scientific Center of the Siberian Branch of the Russian Academy of Sciences" has been engaged in studying the problems of social and economic development of the Republic. Its main research areas are: methodological, social and economic and econometric researches; development of macroeconomic models of regional development; social and economic forecasting; economic zoning and territorial organization of regions; development of the basics of demographic security and labor market of the region; research of problems of housing and communal services of the region; development of economic and social standards of quality of life of the population of the Republic of Sakha (Yakutiya); comprehensive ethnic social and economic expertise of intersectoral interaction in the economy of the region, etc. One of the important areas of the department's research is food safety as long as the food supply of the population is a priority direction of social and economic development of the country and the region. For the effective development of material production, the rate of development of information technology and technology must exceed the rate of production growth, and scientific developments must be ahead of the development rate of engineering and technology. In respect of words spoken, the problem of intensifying science and increasing its effectiveness is an urgent one of ensuring the country's food safety [5]. It is important to note that the problem of food safety legitimately fits to interdisciplinary scientific research of high complexity and great significance [4].

In order to increase the level of population self-sufficiency in basic food products, it is necessary to develop a scientifically based system of regional food supply, regardless of their specific characteristics. This is especially relevant for regions with severe climatic and social and economic conditions such as the Republic of Sakha (Yakutiya) [7].

As a result of the investigations into the problems of food safety in the regions of the North-East of the Russian Federation for 2017-2019, we see that the most important direction of scientists' efforts should be the solution of fundamental production issues, processing and storage of agricultural products, raw materials and food. Success of these tasks depends on many factors, and primarily on the qualifications of scientific staff [8]. Consequently, it is necessary to significantly enhance the intellectual potential of agricultural economic research institutions and scientists of agricultural universities in
evaluating the priority areas of social and economic researches of AIC development. Food safety is one of them. Therefore, agricultural science plays an important role in solving the main tasks of ensuring food safety [6].

4 Conclusion
From the foregoing, it should be concluded that agricultural science, created in Yakutiya, has gone through several stages of its formation and development. Therefore, in 1959 the economic researches in agricultural science were started. However, today the general situation in the country and the Republic has changed dramatically. New problems of market relations have been put on a priority. Although the "eternal" issues that pass from one formation to another remain. That is why, we need to focus on the problems that need to be solved, based on the changed general economic and other situation as well as on ways to overcome the crisis and create a competitive agriculture. It is about strengthening regional science aimed at creating a local food base in the Far North. It is essential to preserve and increase scientific staff, relying on the old and nurturing the young; to enhance the prestige of agricultural economic science, and most importantly – its practical usefulness to the country. Grandly that agricultural economics does not break away from practice, participating in the scientific support and maintaince of the state program; the development of timely measures to supplement and adjust its individual provisions [1]. State for its part should also consider its scientific staff as one of the most important components of the national wealth. The same is true to agricultural economists who should increase their civil responsibility for the fate of Russian agriculture.

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