ISSN: 2321-9602



Indo-American Journal of Agricultural and Veterinary Sciences









editor@iajavs.com iajavs.editor@gmail.com



Challenges in Recruiting and Training Qualified Agriculturists Aarti chabria¹, Sudha²

Abstract.

In this paper, the authors explore the difficulty of training the agricultural sector's future leaders. In this article, we take a look at some of the difficulties professors face at the Agricultural University of the Republic of Tatarstan. The agricultural sector in the Russian Federation is led by the Republic of Tatarstan. It is essential to train the agricultural entrepreneurs of the future so that they can use cutting-edge methods to sustainably grow organic maize and other crops. In order to address queries like "why don't recent college grads want to work in agriculture?" and "why is it so hard to attract recent college grads to agrarian universities?" the writers consulted surveys of recent college grads. This study's conclusions are based on surveys done by the authors. The authors found that a number of issues, including a lack of social infrastructure, low income, and strenuous work in rural areas, discouraged young people from pursuing jobs in agriculture. Kazan State Agrarian University's faculty is aware of these limitations and is making efforts to remedy them by modernizing the curriculum to emphasize personalised instruction.

1 Introduction

This article aims to explore how future agricultural business professionals are now being trained in Tatarstan. Tatarstan ranks third in food production in the Russian Federation, and this sector is seeing a growing need for highly qualified and educated laborers. The Republic of Tatarstan is home to 4.5 million hectares of farmland, 3.4 million of which are suitable for crop production. 7.5% of the RT's GRP comes from agriculture, although just 2.3% of the nation is used for farming. almost 900 thousand people in rural areas of the republic are of working age, making up almost half of the total population.

The agro-industrial complex of the republic provides jobs for over 112.9 thousand people; of these, 79.1 thousand are directly involved in agricultural production while over 34,000 are employed by support and processing enterprises.

Seven percent of the population is involved in farming, while eleven percent are gainfully engaged in the republic's economy [1]. The agriculture sector of Tatarstan is among the most developed in Russia. The economy, however, has difficulties in this regard. The first is training professionals who can excel in the agricultural industry. Since the authors work at a college of agriculture, they have direct experience with the issue at hand.

1,Assistant professor, Department of Pharmaceutical Analysis, Sri Balaji College of Pharmacy ,Jamia Hamdard, New Delhi 2, Assistant professor, Department of Pharmacology, Sri Balaji College of Pharmacy Jamia Hamdard, New Delhi



2 Materials and methods

Our research aims to (1) identify the challenges associated with agriculture training, (2) assess the state of the agricultural industry, and (3) examine the local and international experience of agriculture training experts to improve the efficiency of agriculture training programs. Multiple approaches will be required to verify the hypothesis:

the study, theoretical analysis, and synthesis of social, political, and pedagogical literature; the analysis, comparison, synthesis, and generalization of innovative foreign and domestic experience in training personnel for agriculture; the comparison of data from domestic research based on the methodology of historical and logical analysis of regulatory

documents of home and foreign governments

Our research was theoretically grounded on the works of both international and Russian scholars in the area of agricultural workforce development (e.g., G. Silaste, Mc Granahan, D. Konstantinovsky, M. Butyaykin, A. Valeev, Faizrakhmanov, etc.) [2–5].

Training agricultural workers that make use of the approach and techniques of current research helps advance scientific understanding. It's a chance to take a holistic approach to solving the issue of how to best educate future leaders in the agriculture industry.

EDP Sciences' The Authors' publication. The Creative Commons Attribution License 4.0 (http://creativecommons.org/licenses/by/4.0/) governs the use of this freely available article.

3 Results

The Institute of Agrarian Problems of the Russian Academy of Sciences agrees that agriculture is crucial to national prosperity since a healthy population relies on access to nutritious food. However, it is also vulnerable to a wide variety of threats, many of which are hard to anticipate. Among the worst outcomes associated with "food risks" include deaths caused by hunger, insufficient (low-quality) nutrition, and crops farmed with chemical fertilizers, which increase the prevalence of cancer among humans.

Factors of food poisoning and malnutrition account for 164,000-180,000 deaths annually, or 9-11% of the overall number of premature deaths in Russia, making them one of the top 10 sources of individual strategic hazards of unnatural human loss.

Fifty years ago, the agricultural industry was more simpler and less technologically advanced than it is now. Workers in the agricultural sector must be highly qualified and skilled in using cutting-edge technology. However, there are issues at hand. Universities in the agricultural sector should train experts, yet many graduates of these programs have little interest in careers in the sector. We have a "brain drain" issue, with talented people leaving rural areas for urban centers. This trend indicates that graduates from agricultural institutions are not entering the agricultural workforce.

If they can't find work in agriculture, some young specialists retrain and look for work in the city. Graduating

Those opposed to modernisation prevent them from investing in the development of a cutting-edge infrastructure for cutting-edge educational technology. A significant issue arises when the rate of manufacturing development outstrips the time it takes to educate professionals.

As a result, a paradoxical scenario is emerging in the supply of labor in the agricultural sector of the country's economy at the current time. The unemployment rate in rural areas is rising, and work opportunities are few. However, there is a severe shortage of professionals who

students are leaving the agriculture industry at an alarming rate. However, with a larger population comes a higher requirement for both food and trained agricultural laborers. In addition, people require organic foods that are cultivated in accordance with all technical procedures, such as those used in food transportation, storage, and preparation.

In addition to high rates of poverty in rural areas and a lack of respect for work done in the countryside, researcher G. G. Silaste cites an overemphasis on urban youth as a contributing factor to the exodus of young people from rural areas to urban centers after high school [4]. How might research institutions in the field of agriculture help? Several academics have expressed doubt that the "brain drain" phenomenon can be effectively addressed. They think that cities with the most motivated, educated, and trained young people would benefit from investments in the development of rural education [6].

But our research has shown that without highly skilled employees who are able to apply current technology, direct investments to the agricultural area do not assist to grow it. The process of efficiently and quickly updating the content of educational programs is hampered by the existing gap between the economy and the education, between the education and the science, and the absence of mutual integration of science, higher education, and agricultural business. The high price of higher education and the agriculture sector's antiquated infrastructure.

have the knowledge and mindset to oversee complex hightech projects.

An agreement between major industrial firms and agrarian institutions is the most effective means of educating agricultural professionals at now. Corporations of a certain size may be useful in updating the infrastructure of an agricultural college. The university, meantime, may provide the employees of major corporations with organic

Indo-American Journal of Agricultural and Veterinary Sciences

foods grown on the experimental fields.

The Russian Federation and the Republic of Tatarstan are both major participants in national programmes for agricultural and educational advancement right now. In recent years, the agricultural sector of Tatarstan's economy has seen the appearance of major investors.

They utilize cutting-edge, resource-saving techniques to cultivate crops with cutting-edge, high-performance machinery and animals that are known for their productivity. The development of livestock production, as well as the construction of cutting-edge livestock complexes and the upgrading of equipment and technological foundation, are all made possible thanks to the support of these investors. This will help the agricultural sector of the country become more industrialized in the near future [5].

Agriculture is rapidly evolving into a technologically advanced sector of the modern economy. Investors are keen in cutting-edge agricultural research, thus they often provide funding for such endeavors.

The implementation of the priority national projects "Education," "Development of the agricultural industrial complex," and "Health," in which it is crucial to ensure food security of the country by expanding the production of environmentally friendly and competitive agricultural products, is another important reason to hope that the agricultural field will soon have professionally trained agricultural specialists in the Republic of Tatarstan.

The Kazan State Agricultural University is actively seeking to expand its reach by establishing new campuses in communities outside of Kazan. For a variety of reasons, educating agricultural workers is crucial. For starters, it lowers the cost of college for kids who have to travel a long way to go to Kazan. For the sake of learning,

nearby, practicing where they now call home. This eliminates the need for students to spend a lot of money on supplementary expenses (such as transportation to and lodging at the school). Second, students may get both theoretical and practical experience by working and attending school simultaneously.

Some writers stress a noticeable trend: graduates from rural areas make less money than their urban counterparts do after finishing high school [7]. One of the most socially disadvantaged groups is young people from rural areas, according to research published in 2006 by the Institute of Sociology of the Russian Academy of Sciences. They

4 Discussion

ISSN 2321-9602 www.iajavs.com

argue that the lack of opportunities for kids in rural areas to get a decent education guarantees that their human resources would be inadequate.

Some Russian writers report that pupils in rural schools

have a more common goal of landing a high-paying career in the city. Interestingly, those from affluent rural households are more likely to return to their hometowns after completing higher education (40%) than those from less affluent homes (10%). As a result, the economic security of rural households is a major impediment to leaving their homes [8].

The staff shortage is becoming worse every year, especially among experts and working professionals (annual decline in recent years, 6-9%). The Republic of Tatarstan in the Russian Federation is actively implementing national initiatives to advance the growth of the agricultural industrial complex and the educational system.

At the same time, in recent years, major investors have been drawn to Tatarstan's agricultural industry. They have been able to effectively introduce cutting-edge, resource-saving methods for farming with cutting-edge, high-performance machinery, advance animal husbandry in a way that takes advantage of modern technology and highly productive livestock, construct formidable animal-breeding complexes, and modernize both the material and technical foundations. All of this work will pay off in the not-too-distant future when the agriculture of the country moves toward an industrial model.

Workers in these cutting-edge agro-industrial complexes are highly compensated, get some company benefits, have opportunities to further their careers and gain an appreciation for how agriculture has evolved into a high-tech component of the national economy. Universities in Russia's agricultural sector aim to produce professionals with the know-how to oversee cutting-edge technological endeavors, with an eye toward the future.

Many experts and scientists have argued that the agroindustrial complex system needs new approaches due to the lack of the following: a state training program at the republic level; cooperation and coordination of actions of ministries, departments of educational institutions at all levels; effective integration of vocational education and vocational training; social partnership with business; separation from innovation processes in the agro-industrial complex system.

As a result of these obstacles, only around 30–40% of Russian college graduates with agricultural degrees return to their home regions [10].

ISSN 2321-9602 www.iajavs.com

What can we do to make things better? The solution lies in enhancing the current framework for preparing agricultural professionals of the future. The outcomes have been promising. To begin, the Republic of Tatarstan's agricultural scientific and educational complex is a heterogeneous grouping of institutions devoted to agricultural research and teaching.

The Russian Academy of Agricultural Sciences (RAAS) Tatar Scientific Research Institute of Agriculture, the RAAS Tatar Research Institute of Agrochemistry and Soil Science, and the RAAS State Scientific Institute (SSI) "Federal Center of Toxicological and Radiation Safety" make up the backbone of the agrarian scientific and educational complex.

When it comes to the organization of the agricultural research and educational complex in Kazan, the Kazan State Agrarian University (KSAU) is at the helm. One of the fastest growing educational institutions in the Republic of Tatarstan, it prepares students for careers in agriculture and forestry via its agro engineering programs. Opportunities for training, retraining, and advanced training of employees in various sectors of agricultural production are available thanks to the university's wealth of expertise in these spheres.

Kazan State Agrarian University signed 14 Agreements in March 2007 with the Ministry of Agriculture and Food of the Republic of Tatarstan, the Ministry of Education and Science of the Republic of Tatarstan, large agricultural producers, and the Heads of the municipalities of the Republic of Tatarstan, per a decree from the Government of the Republic of Tatarstan. The goal is to combine the fields of study with the business sector, equip farmers with cutting-edge technology, and improve agricultural education.

These initiatives encourage high school seniors to continue their education in an agriculture college. Students may get practical experience by working throughout their academic years. If a student decides the major they initially chose was not

5 Conclusion

Young people's interest in working in agriculture is dampened by a lack of social infrastructure, poor earnings, and a lack of prestige of labor in rural regions. The shortage of skilled farmers may be attributed in part to these issues. There are a number of factors that contribute to the brain drain from rural areas, including the great reliance of agricultural employment on weather conditions and the expensive expense of attending college away from home (including tuition, books, housing, etc.).

Training workers and professionals for the agro industrial complex lacks the backing of science and regulation. No yearly checks are made to determine which experts are required.

The agro-industrial complex lacks future-looking and

6 Acknowledgements

The work is performed according to the Russian

the best fit, the institution allows them to switch majors.

In order to accommodate students who are also running agricultural businesses, the institution has invested heavily in expanding opportunities for distance learning.

How can the issue with training staff for what universities do better?agriculture? We focus first on high schoolers. Agricultural careers have several benefits, which are discussed during yearly school roundtable discussions. The faculty has parent meetings many times each year. Agrarian universities place a premium on mathematics, biology, chemistry, physics, botany, and other STEM subjects; therefore, professors hold meetings with parents and students to discuss these and other topics of interest.

"Open door" days are a great opportunity to "capture" high school students who may otherwise not consider attending an agriculture institution. On these designated days, prospective students are invited to campus to meet with faculty members and ask any and all questions they may have regarding the university's academic offerings, financial aid, study abroad opportunities, and more. Secondary school pupils benefit from these "open days" because they give them more agency over their professional futures.

In addition, students may learn about the cutting-edge technology used in Russian Federation agriculture by seeing a fleet of specialized equipments and tractors.

They may also see faculty members in action and hear briefings on the faculty members' research. There are now landscape design and seed-selection programs available to students at Kazan State Agrarian University.

Colleges often offer double degrees to students who show promise in two distinct areas of agriculture (for example, agronomy and seed growing, landscape architecture and economics).

cutting-edge methods for reorganizing its concentration of expertise.

Because of this, the agro-industrial complex is unable to produce enough trained workers to meet demand. The declining percentage of the world's population that lives in rural areas, set against the backdrop of the world's overall population rise causes more food to be eaten and more technology to be used, both of which are bad for the environment.

The faculty at Kazan State Agrarian University recognizes these drawbacks and is attempting to remedy the problem by, among other things, upgrading the educational process and altering the university's traditional approaches to teaching and administration.

Government Program of Competitive Growth of Kazan State Agrarian University.



References

- Employment of Graduates from Agricultural Universities: Problems, Successful Experience, and Practical Solutions, 1 A. Valiev, G. Fassakhova, L. Shagivaliev, F. Nezhmetdinova, B. Ziganshin (Kazan State University of Agriculture (2018)
- Agricultural scientific and educational potential of the Republic of Tatarstan and the paths for its development, D. Faizrakhmanov, A.R. Valiev, F.T. Nezhmetdinova, and G.D. Krupina. Kazan State Agrarian University Bulletin 38 (2008):5-10.
- 3. Thirdly, D. Konstantinovsky, Adaptation or self-determination? Global Russia, Volume 2, Pages 123–143
- G. Silaste, "The Media's Impact on the Future Aspirations of Rural Youth" Journal of Sociological Research 12, No.
- M. Butyaykin, Contemporary problems in the labor market for students at agricultural and economic colleges You may get the file by visiting http://sisupr.mrsu.ru/2011-4/PDF/11/Nacharkina.pdf.

- 6. Education and rural economic development: Strategies for the 1990s, United States Department of Agriculture, Washington, DC, 1991, Mc. Granahan and D. A. Ghelfi.
- In V. B. Zvonovsky, Youth of the Samara Region in 2002: Current Situation and Development Trends, 194-223 (Samara, 2003),
 V. Magun, M. Engovatov, Life Claims of Different Social Groups of Young People.
- 8. R. Kazakbaev, Young People in Bashkortostan: Their Preconceptions of Rural Life (2008) 8 11:77–81 (2005), Sociological Studies
- 9. Education as a springboard to success: the aspirations of Russia's rural kids, by T. Abankina, A. Krasilova, and G. Yastrebov, Education Issues 2 (2008):87-89.
- 10. Sociological studies, 1, 91-94 (2005), and P. Mikheev, Dynamics of life values of rural adolescents.