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Problems of Innovation Oriented Manpower in Rural Areas Formation

Abstract. *Introduction.* Creating economy that is innovative in all its spheres, including agricultural one, requires, apart from infrastructure, innovation oriented manpower. That is why key element of innovation management is analysis of manpower's readiness to implement innovations. *Purpose.* To determine basic difficulties of innovation oriented manpower formation in rural areas. *Results.* The 2014 sample survey among the rural areas' residents on the matter of readiness to introduce innovations in professional sphere showed that 48% of respondents expressed the view that the problem of low innovation activity in agribusiness is rooted in the social and psychological unpreparedness of the rural areas residents to innovate and lack of innovation culture. *Conclusions.* To improve the efficiency of innovation oriented manpower formation in the rural areas, it is necessary to generate knowledge in the field of practical introduction of innovations, wide propagation of information, teaching young specialists the basics of innovation.

Keywords: Agribusiness; Innovation; Innovation Oriented Manpower; Rural Areas

JEL Classification: J24; J29; J40; O18; O31

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Проблемы формирования инновационно ориентированных кадров на селе

Аннотация. Развитие инновационной экономики во всех сферах национального хозяйства, в том числе в аграрном секторе, требует формирования как соответствующей материально-технической базы, так и инновационно ориентированных кадров. Поэтому обязательным элементом управления инновационной средой является анализ готовности работников к осуществлению инновационной деятельности. Цель статьи – выявление основных проблем формирования инновационно ориентированных кадров на селе. В ходе проведенного авторами статьи в 2014 году выборочного анкетирования жителей села относительно проблем, связанных с внедрением инноваций в профессиональную деятельность, 48% респондентов указали на низкую инновационную активность агробизнеса вследствие социально-психологической неготовности сельян к подобным новшествам и недостаточной инновационной культуры. На основе авторских исследований и результатов опроса было определено, что для повышения эффективности формирования инновационно ориентированных кадров на селе необходимы: генерирование знаний в области практического внедрения инноваций, широкое распространение информации, обучение молодых специалистов основам инноватики.

Ключевые слова: агробизнес; инновации; инновационно ориентированные кадры; сельские территории.

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Проблеми формування інноваційно орієнтованих кадрів на селі

Анотація. Розвиток інноваційної економіки в усіх сферах національного господарства, у тому числі в аграрному секторі, вимагає формування не тільки відповідної матеріально-технічної бази, а й інноваційно орієнтованих кадрів. Тому обов'язковим елементом управління інноваційним середовищем є аналіз готовності працівників до здійснення інноваційної діяльності. Мета статті – виявлення основних проблем формування інноваційно орієнтованих кадрів на селі. У ході проведенного авторами статті у 2014 році вибіркового опитування жителів села відносно проблем, пов'язаних із впровадженням інновацій у професійну діяльність, 48% респондентів висказали на те, що низька інноваційна активність агробізнесу спричинена насамперед соціально-психологічною неготовністю селян до подібних нововведень і недостатньою інноваційною культурою. На основі авторських досліджень та результатів опитування було визначено, що для підвищення ефективності формування інноваційно орієнтованих кадрів на селі необхідні генерування знань у галузі практичного впровадження інновацій, широке розповсюдження інформації, навчання молодих фахівців основам інноватики.

Ключові слова: агробізнес; інновації; інноваційно орієнтовані кадри; сільські території.

1. Introduction

To provide stable and progressive development of our state's economy still highly oriented on raw materials export with insufficient infrastructure and low investment attractiveness, transition to the path on innovative development is required.

The leading countries of the world are actively investing in knowledge-based economy. Such investments are catching up by their volume with the investments in fixed assets. The increasing role of new technologies requires continuous developing and implementing of lifelong education and training on a qualitatively new level.

Numerous problems which national agricultural sphere is facing at present could be solved by developing the economy based on knowledge. According to The Strategy of Innovative Development of Russian Federation for the period up to 2020, only this kind of economy should be a major factor in the innovation oriented development of professional manpower. Implementation of the strategy depends on the effectiveness of regional innovative processes, ensuring creation of a unified national innovation system.

One of the barriers on the way to innovative development and elimination of the technology gap is the problem of qualified manpower training and its financing. On the one hand, difficulties with the staff providing research and development are growing. Also, the lack of operating manpower and skilled workers makes up one more problem. Agricultural companies producing innovative products are facing the challenge of workforce, which is the main carrier of key technologies, aging. Without supply of new young workers, such technologies could be lost.

On the other hand, another significant problem is almost complete absence of innovation-oriented management. Recent surveys have shown that there is a lack of managers prepared to take high risks and able to build-up effectively innovative processes.

2. Brief Literature Review

Problems of innovation theory modern development and applied aspects of professional personnel involvement in innovative processes are studied by L. Ryneiska [1], R. M. Nureev [2], S. M. Ilyashenko, Yu. S. Shypulina [3], N. Yaskova and M. Matveeva [4], A. S. Frolov [5], V. V. Rau, L. V. Skulskaya, and T. K. Shirokova [6], V. M. Oshchepkov and Yu. D. Kuzmina [7], R. T. Nasibullin [8], G. Titarenko [9], A. V. Suvorov, N. V. Suvorov, V. G. Grebennikov, V. N. Ivanov, O. N. Boldov, M. D. Krasilnikova, N. V. Bondarenko [10], N. L. V. Krivenko, S. V. Ovcharenko [11].

In particular, L. Ryneiska (2014) states that scientific and technological progress has always been a determining factor of economic development. In modern globalized economy it appears to be more and more innovative. R. M. Nureev (2013) is studying the aspects of the innovation theory. S. M. Ilyashenko and Yu. S. Shipulina (2014) consider a high level of innovative culture to be one of the main conditions of effective implementation of innovations.

N. Yaskova and M. Matveeva (2014) presented an analysis of different mechanisms of investment in modernization of national economy. A. S. Frolov (2014) focuses on the difficulties of scientific and technological development of national economy planning. V. V. Rau, L. V. Skulskaya, T. K. Shyrokova (2014) study agricultural sphere of Russian economy taking into account risks arising in the context of globalization.

V. M. Oshchepkov and Yu. D. Kuzmina (2014) study different aspects of regional innovative development. R. T. Nasibullin (2014) analyzes attitude of different groups of workers towards the problems of innovative development in regional companies.

G. Titarenko (2013) suggests evaluating human resources as a part of national innovative system. A. V. Suvorov, N. V. Suvorov, V. G. Grebennikov, V. N. Ivanov, O. N. Boldov, M. D. Krasilnikova, N. V. Bondarenko (2014) study different approaches to the measuring of dynamics and structure of human capital and evaluate its accumulated impact on the rate of economic growth. L. V. Kryvenko and S. V. Ovcharenko (2014) offer a technique of qualimetric evaluation of manpower's innovative poten-

tial depending on existence of workers' innovative abilities and capabilities. It also measures the ways to optimize workers' innovative abilities and capabilities and the level of manpower's innovative potential.

Currently, a priority of formation and development of innovative economy has been declared in Russia. Therefore, regulatory framework is being improved to facilitate innovations; a set of policy documents has been approved and complex reforms in the sphere of education are being carried out. Economic incentives, such as «start-up», are used. Venture funds are being established. Competitions are held. Grants, subsidies and tax allowances are being provided. Thus, there is an active formation of innovative infrastructure. Nevertheless, innovative activity of workforce is insufficient, especially in agribusiness. However, a big set of social and psychological problems of innovation oriented manpower formation is being overlooked.

3. Purpose

The purpose of the article is to determine primary problems of innovation oriented manpower formation in the rural areas.

4. Results

In 2014, the authors conducted a survey study on the topic: «Readiness of the rural inhabitants to innovations»¹. 1486 participants who live in the rural areas of Saratov region (Russia) took part in the survey.² The sample population was 0.64% of the total population.

The study showed that the main source of information for the rural areas inhabitants about innovations is mass media (TV, newspapers, magazines) and communication with colleagues. Such answers gave 43% and 31% of the interviewees respectively (Figure 1).

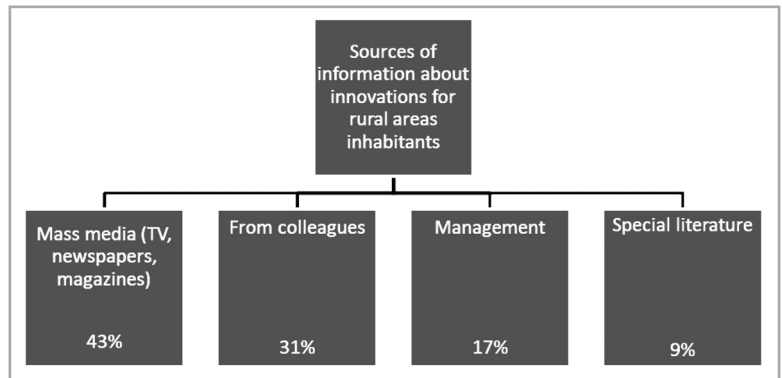


Fig. 1: Sources of information for the rural areas inhabitants about innovations
Source: Own research

Thus, 81% of respondents have positive attitude towards innovations in agricultural sphere (Figure 2).

Talking about general attitude of the rural areas inhabitants towards innovations, we should note that 58% of the respondents agree that innovation allow agribusiness remaining competitive on the market. 23% think that innovations provide unlimited opportunities for businesses. 12% are confident that innovations allow the company becoming a market leader. And only 7% of the respondents consider innovations to be a luxury for business.

When it comes to the interviewees' opinion about introduction of innovations at their workplaces, 37% are sure that introduction of innovations will positively affect their professionalism.

¹ The survey was conducted based on the questionnaire developed by the authors. Authors express gratitude to students of the faculty of economics and management of Saratov State Agrarian University named after N. I. Vavilov, who participated in the poll as interviewers.

² Saratov region is placed in the south-east part of the European part of Russia, in the northern part Lower Volga region. Area of the region is 101.2 square km and is equal to the combined square of such states as Belgium, Switzerland and Albania. The area includes 38 districts, 1,805 settlements, of which 355 are rural. Population as for 01.01.2012 accounts 1.508 thousand people, including 233.9 thousand people of rural population.

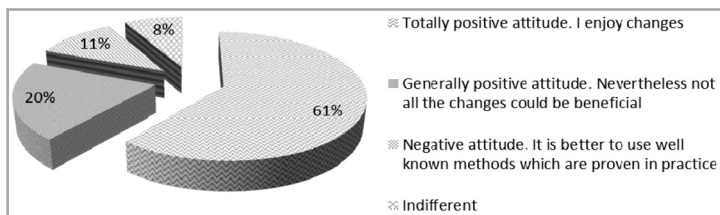


Fig. 2: General attitude of the respondents towards innovation
Source: Own research

34% consider introduction of innovations as one of the ways of their wages increasing. 15% offer arguments that introduction of innovations could possibly lead to their promotion. 7% of the interviewees disagree that introduction of new technologies is necessary, because it could be the reason of possible instability in the future work of the company. Another 7% find it difficult to estimate the introduction of innovations at their workplaces.

Also, the majority of respondents (49%) agree that introduction of innovations in their workplaces could significantly improve performance. 28% are convinced that workplace improvements by means of innovations is impossible. 24% have no opinion on this matter.

The interviewees think that major factors preventing the innovative development in the rural areas (Figure 3) are: lack of funds for the purchase of new machinery, equipment, workers retraining (52%), not readiness of workers for changes, insufficient knowledge and skills (25%), agribusiness management's unwillingness to innovate (23%). Thus, we can conclude that 48% of the respondents expressed an opinion that low agribusiness innovative activity problems are rooted in social and psychological unpreparedness of the rural areas inhabitants to innovations and lack of innovation culture.

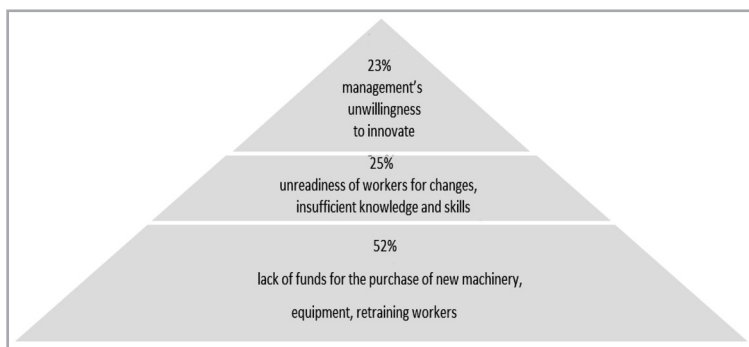


Fig. 3: Major factors preventing the innovative development in the rural areas
Source: Own research

This conclusion is supported by the fact that significant percentage of respondents (45%) are not willing to undergo regular training programs of professional development at their own expense (Figure 4). This indicates their not readiness to comply with the principle of «learning for life», proclaimed by the European Council in the program «Education and Training 2010».

Motives to receive additional training, according to the interviewees, could serve the fear of losing a job (42%), salary increase (22%) and promotion (17%).

Thus, the conducted sociological survey uncovers existing problems of regional and national authorities' insufficient attention to the social oriented manpower formation in the rural areas, which leads to a significant slowdown in economic

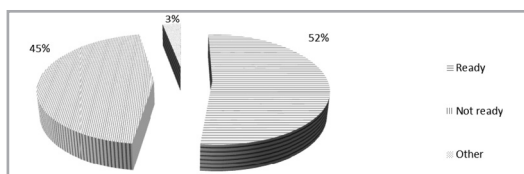


Fig. 4: The readiness of innovation oriented manpower for the professional development training at own expense
Source: Own research

modernization and its transition into innovative «main-stream».

5. Conclusion

According to the vast majority of scholars, one of the major factors of innovative thinking formation among the rural areas workers and successful training of innovation-oriented manpower is implementation of the innovative education concept for the rural areas inhabitants. The point of innovative education is in its continuity, accessibility, focus on the formation of readiness to learn, relearn, evaluate and apply information, to analyze the problem from a new angle. It also implies forming of open-mindedness, willingness to creative understanding of problems and solutions, the ability to work in a diverse team, high communicability, tolerance, self-organization skills and the ability to self-set goals. In the next 2-4 years, implementation of the system of innovative education for the rural areas inhabitants will change the traditional attitude towards work, increase the initiative of managers and employees of agribusiness, the desire to use innovative approaches in work and increase productivity by 15-18%.

References

- Ryneyska, L. (2014). The world innovation economy: modern trends of development. *Ekonomichnij Casopis-XXI (Economic Annals-XXI)*, 7-8(1), 8-11.
- Nureev, R. M. (2013). The Theory of Innovations and Its Implementation in Modern Russia. *17th Annual Conference of the European Society for the History of Economic Thought* (pp. 115-116). London: ESHE.
- Ilyashenko, S. M. & Shypulina, Yu. S. (2014). Factor analysis of innovative enterprise culture. *Ekonomichnij Casopis-XXI (Economic Annals-XXI)*, 3-4(1), 31-34 (in Ukr.).
- Yaskova, N. & Matveeva, M. (2014). Innovative focus of the investment activity within the modernization of the national economy. *Ekonomichnij Casopis-XXI (Economic Annals-XXI)*, 1-2(2), 42-45.
- Frolov, A. S. (2014). Problems of scientific and technological development planning at the national level. *Studies on Russian Economic Development*, 25(6), 586-596.
- Rau, V. V., Skulskaya, L. V., & Shirokova, T. K. (2014). Agricultural sector of Russia in face of globalization challenge. *Studies on Russian Economic Development*, 25(5), 485-494.
- Oshchepkov, V. M., & Kuzmina, Yu. D. (2014). Aspects of regional innovation development: The case of Volga Federal District. *Studies on Russian Economic Development*, 25(4), 399-404.
- Nasibullin, R. T. (2014). Innovation is not only about emotions. *Sotsiolozhicheskiye issledovaniya (Sociological studies)*, 9, 58-63 (in Russ.).
- Titarenko, G. (2013). The strategy of the human capital reproduction in the concept of the national innovation system development. *Ekonomichnij Casopis-XXI (Economic Annals-XXI)*, 11-12(1), 27-29.
- Suvorov, A. V., Suvorov, N. V., Grebennikov, V. G. et al. (2014). Approaches to the dynamics and structure of human capital measuring and its accumulated impact on economic growth assessing. *Studies on Russian Economic Development*, 25(3), 215-224.
- Krivenko, L. V. & Ovcharenko, S. V. (2014). The conceptual basis for the development of human capital in terms of increase of competitiveness of the country. *Ekonomichnij Casopis-XXI (Economic Annals-XXI)*, 1-2(2), 23-26 (in Ukr.).

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References (in language original)

- Ryneyska L. The world innovation economy: modern trends of development / L. Ryneyska // *Economic Annals-XXI*. – 2014. – № 7-8(1). – P. 8-11.
- Nureev R. M. The Theory of Innovations and Its Implementation in Modern Russia / R. M. Nureev // *17th Annual Conference of the European Society for the History of Economic Thought*. – London : ESHE, 2013. – P. 115-116.
- Ілляшенко С. М. Факторний аналіз стану інноваційної культури підприємства / С. М. Ілляшенко, Ю. С. Шипуліна // *Економічний часопис-XXI*. – 2014. – № 3-4(1). – С. 31-34.
- Yaskova N. Innovative focus of the investment activity within the modernization of the national economy / N. Yaskova, M. Matveeva // *Ekonomichnij Casopis-XXI (Economic Annals-XXI)*. – 2013. – No 1-2(1). – P. 42-45.
- Frolov A. S. Problems of planning scientific and technological development at the national level / A. Frolov // *Studies on Russian Economic Development*. – November 2014. – Volume 25. – Issue 6. – P. 586-596.
- Rau V. V. Agricultural sector of Russia in face of globalization challenge / V. V. Rau, T. K. Skulskaya // *Studies on Russian Economic Development*. – September 2014. – Volume 25. – Issue 5. – P. 485-494.
- Oshchepkov V. M. Aspects of regional innovation development: The case of Volga Federal District / V. M. Oshchepkov, Yu. D. Kuzmina // *Studies on Russian Economic Development*. – July 2014. – Volume 25. – Issue 4. – P. 399-404.
- Насібуллін Р. Т. Вокруг інновацій не тільки емоції / Р. Т. Насібуллін // *СОЦІС. Соціологічні дослідження*. – 2014. – № 9. – С. 58-63.
- Titarenko G. The strategy of the human capital reproduction in the concept of the national innovation system development / G. Titarenko // *Ekonomichnij Casopis-XXI (Economic Annals-XXI)*. – 2013. – No 11-12(1). – P. 27-29.
- Suvorov A. V. Approaches to measuring the dynamics and structure of human capital and assessing its accumulated impact on economic growth / A. V. Suvorov, N. V. Suvorov, V. G. Grebennikov, V. N. Ivanov, O. N. Boldov, M. D. Krasilnikova, N. V. Bondarenko // *Studies on Russian Economic Development*. – May 2014. – Volume 25. – Issue 3. – P. 215-224.
- Кривенко Л. В. Концептуальні засади розвитку людського капіталу в умовах підвищення конкурентоспроможності країни / Л. В. Кривенко, С. В. Овчаренко // *Економічний часопис-XXI*. – 2014. – No 1-2(1). – P. 23-26.

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