

# Strategies and prospects for territorial mobility of environmental graduates with higher education

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**Abstract.** The article presents the results of a study of the strategy and prospects of territorial mobility of young people who have received higher education in the field of ecology at a regional university. A review of scientific literature and a statistical analysis of the opinions and judgments of environmental students of the last year of study at the bachelor's program at the Agricultural University confirm the relevance of the research topic. They allow you to look at the prospects for the territorial mobility of environmental graduates, both from the point of view of their own targets, and from the point of view of their importance for the south of Russia and the capital regions of Russia. The study found that the vector of territorial mobility of environmental graduates is aimed at the capital regions of Russia and abroad. The expectations of young people are associated with higher job prospects on better conditions (high-paying and interesting work with real career opportunities) outside the Stavropol Territory and southern Russia.

## 1 Introduction

Youth in society is a social group that has needs and motivators to change the territory of residence. It is young people who are ready to find a place to live and work with the most favorable characteristics, ensuring the achievement of life and professional goals. The undoubted advantage of the territories: regions and municipalities can be considered a high proportion of young people in the structure of the population. Young people show high professional, industrial, entrepreneurial and consumer activity [1-2], are able to generate changes [3], having a positive impact on the sustainable socio-economic development of the territory [4]. As shown by numerous studies, young people are as open as possible to various kinds of innovations, including technical, technological and economic [5-6],

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committed to the principles of sustainable development through the economic and environmental well-being of territories and business entities [7-8].

In connection with the actualization of the agenda for sustainable development of regions and municipalities, an important component of which is the ecological well-being of territories, a positive fact is the availability of highly qualified specialists in the field of ecology and nature management. An important research issue in this regard is understanding the strategies and prospects of territorial mobility of graduates of certain educational programs of higher education, in particular ecologists.

The relevance of the issue of social and ecological competence of university graduates is revealed in their research by the authors Chekanushkina E.N., Timoshchuk N.A., Kolyvanova L.A., Fakhrutdinova E.V. [nine]. The authors have developed and tested a model of social and ecological competence of a university graduate, based on an interdisciplinary approach to the process of its formation. For our study, an important conclusion of the authors of the article is that there is a positive correlation between socio-ecological competence and the success of the professional career of university graduates. The position of the relevance of the formation of various aspects of the socio-ecological competence of graduates of higher education can be traced in a number of studies [10-13].

The tendency for the reduction of students in agricultural programs, which Russian agricultural education has encountered, is characteristic not only for our country, but in general for this direction of training in higher education in the world. Authors Inegbedion G., Islam M.M. based on a survey of students at four universities in southwestern Nigeria, we conducted an analysis of motivation, taking into account the theory of self-determination [14]. The key motives in professional self-determination were identified: the opportunity to learn about innovation and the prospects for self-employment. The research results emphasize the influence of the socio-ecological context on the behavior of young people and the need for competencies in the field of agro-innovation and agricultural entrepreneurship for the implementation of strategies and prospects for the future territorial mobility of young people with agricultural education.

The study by the authors Grace K., Eng S. is devoted to understanding the approaches to achieving educational and career goals of female high school graduates. The main conclusion reached by the authors is that the interaction of environmental, social and personal factors is a powerful force in achieving the goals of professional self-determination [15]. This approach is confirmed in a number of studies, including the gender aspect of environmental competence in employment strategies and government policies to support sustainable development of territories [16-17]. For our study, the article sounded an important aspect of the success of strategies and prospects for territorial mobility of graduates - the presence of an environmental factor as one of the leading in achieving the goals set by young people and, at the same time, related to indicators of sustainability and well-being of territories.

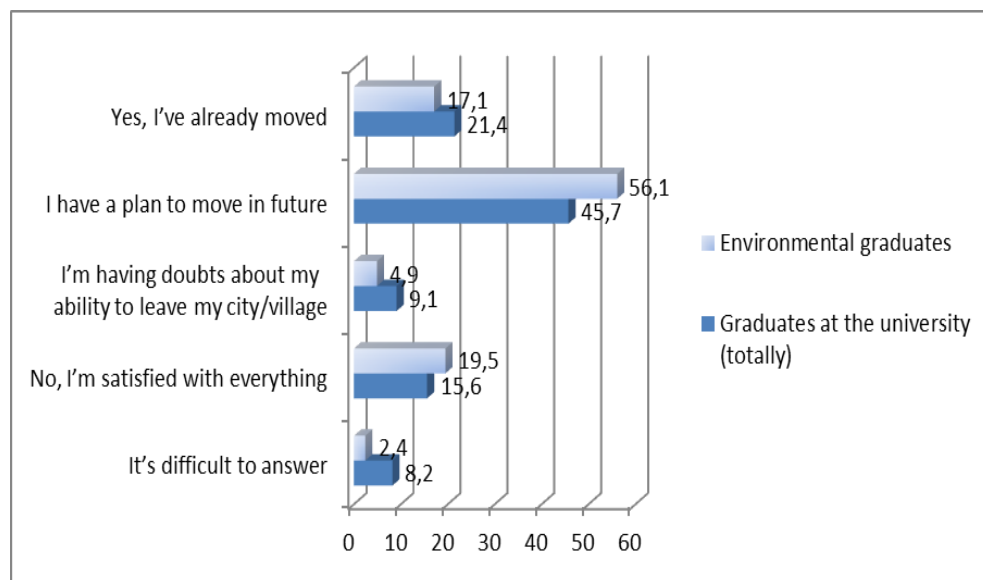
The ideas about the prospects of territorial mobility of young people getting higher education in Yekaterinburg were analyzed in the study of the authors Abramova S.B., Antonova N.L., Pimenova, O.I. [18]. Based on the results of a survey of graduate students of several universities, it was found that young people idealize the city as a place to live. As the main motives for territorial mobility, students highlight the desire for independence and favorable urban conditions. The authors emphasize that young people with higher education articulate high requirements for the urban environment, and therefore strive to leave after completing their studies at a university in large industrial centers and metropolitan regions. The results of this study show that the trend towards building a vector of territorial mobility of young people is aimed at large urban agglomerations and metropolitan regions. This situation is typical not only for the south of Russia, the Urals, but also noted in a number of foreign studies [19-26].

## 2 Materials and methods

The purpose of the study is to obtain reliable data on the strategy and plans for the territorial mobility of graduates-ecologists of bachelor's programs at an agricultural university. To achieve the goal, a questionnaire survey toolkit was developed that solves a number of tasks. The first task is to determine in which region the environmental graduates plan to realize their life plans; the second task - what are the main reasons for the plans to move to another territory; the third task is to assess the awareness of the experience of moving people from the immediate environment of the respondents; the fourth task is to assess the level of wages that could stimulate the movement of graduates to another region. The collection of primary empirical data was carried out by the method of an individual questionnaire survey in February 2020. In total, 147 people from the number of environmental students of graduate courses of the Stavropol State Agrarian University took part in the survey at the final stage of the bachelor's program. Statistical analysis of survey data was carried out using the statistical package SPSS Statistics (version 21).

## 3 Results and discussion

The data of a survey of graduate students-ecologists show the high potential of territorial mobility of this category of young people. Currently, 17.1% have already changed their place of residence and another 56.1% are going to make this dream come true. There is another 4.9% of respondents who would like to leave, but they have doubts. Only 19.5% of the survey participants said they were happy with everything. The data is presented in the following fig. 1.



**Fig. 1.** Comparative assessment of the presence of plans to change the place of residence of environmental graduates and graduates of other educational programs in general for Stavropol State Agrarian University (%).

Thus, we can talk about the existence of plans for the territorial relocation of environmental graduates who currently live in the southern region of Russia. The

mobilization potential of these plans, given the appropriate conditions, is estimated at 50-60% of the total number of graduates of environmental programs.

The vector of territorial mobility of environmental graduates is aimed at the regional center (12.2%), Moscow and St. Petersburg (9.8% and 9.8% of respondents, respectively), and abroad (22.0%). On the one hand, we can talk about positive learning outcomes at the Stavropol State Agrarian University - the high quality of the acquired competencies allows you to confidently plan and find employment in the capital regions and abroad. On the other hand, questions arise about the youth policy of the agrarian region and the attractiveness of socio-economic conditions for young people with higher agrarian and environmental education. Data on the reasons for the move of graduates of different profiles of the agricultural university are presented in Table 1.

**Table 1.** Reasons for moving to another city - opinions of graduates of Agrarian University, %.

Possible reasons	Profile of Graduate									
	Agronomists	Veterinarians	Mechanical Engineers	Service and Tourism Specialists	Livestock Specialist	Financiers	Ecologists	Economists	Electrical Engineers	Total for Agrarian University
1. To get an education	26,4	9,8	34,2	23,5	15,4	14,6	19,5	15,9	25,9	19,1
2. Apply for a job	54,2	68,3	60,5	64,7	61,5	56,3	65,9	63,6	56,9	58,9
3. Build a family	27,8	39,0	52,6	11,8	38,5	39,8	26,8	29,0	20,7	31,4
4. Make new friends	19,4	36,6	18,4	41,2	30,8	33,0	31,7	22,4	25,9	26,5
5. Become famous	4,2	2,4	0,0	11,8	7,7	2,9	9,8	9,3	1,7	4,9
6. I find it difficult to answer	19,4	9,8	13,2	23,5	15,4	14,6	14,6	8,4	10,3	13,0
7. I don't want to move anywhere, everything is good at my place of residence	12,5	12,2	10,5	17,6	15,4	17,5	12,2	17,8	22,4	15,3
8. Other reasons	0,0	2,4	0,0	0,0	0,0	2,0	2,4	2,7	0,0	1,4

Among the targets for the territorial mobility of environmental graduates, employment is in the first place (noted by 65.9% of survey participants); in second place is the development of social networks through new acquaintances, contacts (noted by 31.7% of survey participants); on the third - creating a family (noted by 26.8% of survey participants). Completes the list of significant targets of territorial mobility, the main vector of which is aimed at the capital regions and abroad, education. It should be noted that these facts once again indirectly confirm the high level of quality of higher education in the field of ecology at the Stavropol State Agrarian University, which allows planning employment and continuing education in the capital regions.

According to 26.9% of graduates of the Stavropol State Agrarian University, in order to find a good and interesting job, you do not need to go to another region; you can find work in your small homeland.

In the case of a job offer, 39.0% of graduates agree to move to another region on terms of high pay, guarantees of career growth and if the job is interesting (24.4%, 17.1%, respectively). Thus, it is possible to effectively stimulate the labor migration of young specialists mainly on the basis of high wages.

Almost half of the graduates expect a salary ranging from 20 thousand rubles to 35 thousand rubles. With an average salary in the region of about 32.0 thousand rubles, we see legitimate expectations of environmental students at the final courses of Stavropol State Agrarian University. 43.9% of graduates indicated higher expectations in the field of monetary remuneration for work: 7.3% of survey participants expect 35-40 thousand rubles; by 45-50 thousand rubles - 12.2% of survey participants; 24.4% of survey participants are guided by a salary of over 50 thousand rubles and above.

## 4 Conclusion

The vector of territorial mobility of environmental graduates aimed at the capital regions of Russia and abroad, shows the ideas of young people about higher employment prospects on better conditions (highly paid and interesting work with real career opportunities) outside the Stavropol Territory and southern Russia.

From the point of view of the region, in which graduates-environmentalists received higher agricultural education, lived up to the present time, it speaks of the insufficient attractiveness of employment for young people, and perhaps the lack of demand for this category of workers. In turn, the lack of demand for ecologists in the south of Russia is determined both by the relative ecological well-being of the territories, and by insufficient attention of the regional establishment to the ecological component of sustainable development of territories. These issues require further consideration, which can be studied in the framework of an ongoing study.

When considering the situation on a national scale as a whole, a possible influx of young people with higher education in the field of ecology to the capital regions, even if they are employed outside their specialty, will have a positive effect on the process of ensuring the social and ecological well-being of the territory. Since during the period of study at an agricultural university, the social and environmental competence of young specialists was formed at a high level. And professional socialization took place in the normative field of ecology, which can be a continued promising trend in the process of horizontal professional and territorial mobility.

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