

# Systemic Models of Managing the Development of Human Capital: Technology Perspective

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\* The reported study was funded by RFBR, project number 19-29-07315.

Article Info	Abstract:
Volume 83	The article considers the problems of the development of human capital in rural areas
Page Number: 715 - 722	in a crisis. The formed system of human capital development should determine the
Publication Issue:	qualitative and quantitative composition of labor resources, be a priority for food
May - June 2020	security and the foundation of competitiveness. Using, taking into account existing
	problems, systemic models of managing the development of human capital, it will
Article History	allow us to identify areas and identify methods and tools for ensuring effective
Article Received: 11 August 2019	decision-making at all levels.
Revised: 18 November 2019	Keywords: human capital, rural areas, crisis, skilled workers, unemployment.
Accepted: 23 January 2020	

#### I. INTRODUCTION

Currently, in the context of the expanding pandemic of coronavirus infection, a new economic, political and social structure is being formed. The consequences of the growing global tragedy can be very significant, including social, population decline and, of course, a deep economic downturn. The global economy formed in recent decades has fundamentally determined the

Publication: 09 May 2020



vector of development of the management system of many territories. Economic giants began to influence not only the socio-economic development of society, but also exert political dictatorship in the adoption of many managerial decisions. Today, the acute question is how small and medium-sized businesses will cope with the economic problems that have arisen and how much this situation will contribute to an even greater seizure of market segments by global companies and their further redistribution among themselves

We believe that the main priority for preventing growing socio-economic problems is the formation of quality living standards, determined by the development of the entire spectrum of society. For this, a particularly significant change should be the creation of conditions for the formation of human capital and its effective use, both at micro and macro levels. Of particular relevance in solving this issue is the micro-level, i.e. it is necessary to radically change the concept of human capital as the basis of a new system for the development of territories, the reproduction of labor resources and labor. The formed system of human capital development should determine the qualitative and quantitative composition of labor resources, be a priority for food security and the foundation of competitiveness. Using, taking into account existing problems, systemic models of managing the development of human capital, it will

allow us to identify areas and identify methods and tools for ensuring effective decision-making at all levels.

#### II. METHODOLOGY

We see a systematic presentation of the above areas of problem solving in creating the conditions for the development of rural territories. There is a need to provide employment and increase rural incomes. In our country, especially in rural areas, there is an acute shortage of skilled workers. Farmers are quite acute problem of reducing the cost of production and increase its quality. Achieving this goal requires the use of both significant investments of physical capital and the use of human potential.

In modern conditions, the totality of knowledge, skills, as well as the degree of development of professional non-professional competencies is and quite significant. In the agricultural sector of Russia, serious difficulties are observed associated with the formation of labor potential [5, 7, 8]. Firstly, this is the aging of existing personnel, as evidenced by the data presented in Figure 1. It should be noted that it is the age-related people who are more likely to suffer from coronavirus infection, in this regard, special attention should be paid to this category of workers when creating jobs and development of labor potential.

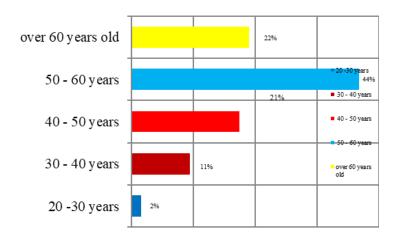


Figure 1. Age structure of agricultural workers in Russia



Secondly, the natural decline in the rural population, as evidenced by the data presented in Figure 2, which

indicate that the rural population is declining. Interregional migration processes are observed [12].

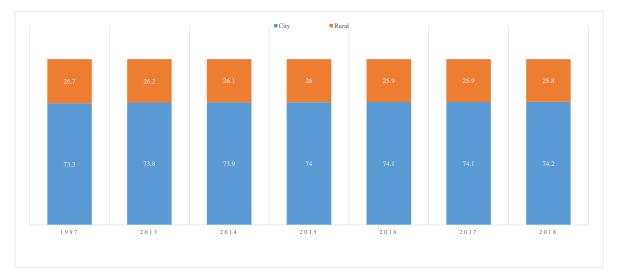


Figure 2. Dynamics of the structure of the urban and rural population of Russia

In addition to the outflow of population from rural areas, there is a decrease in the proportion of the number of workers employed in the agricultural sector (Figure 3). In 2018, the share of the population

employed in agriculture was 7.3%, while in 2012 this indicator remained at 8.7%. Over 6 years, the decline in numbers was 1.4% [15].

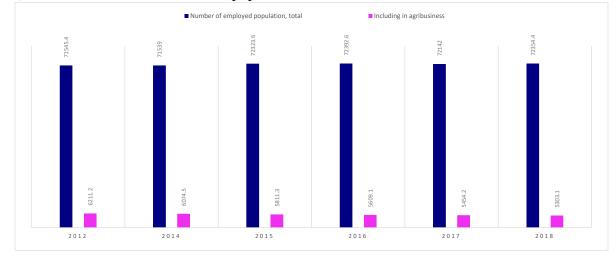


Figure 3. The number of agricultural workers

Thirdly, the share of workers with specialized education is decreasing. So, in 2018, the share of

specialists with higher education was 55% (Figure 4) [19].



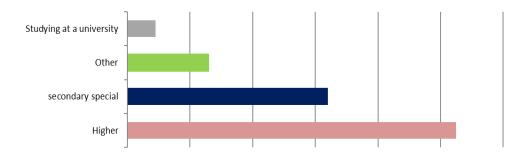


Figure 4. Education structure of agricultural workers in Russia

Fourth, the share of agricultural workers who have undergone professional development and retraining annually decreases. So, today the motivation for advanced training among managers remains low. In 2018, only 8.5% of specialists and 5.4% of managers underwent advanced training (Figure 5) [18].

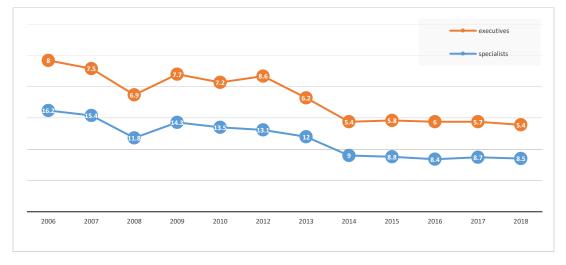


Figure 5. Continuing education of agricultural workers in Russia

The next big enough problem is employment. Today, it has dire consequences for both men and women. However, it should be noted that in the context of the crisis that has begun, the position of women and men in the labor market is formed and develops in different ways.

# III. RESULTS AND DISCUSSION

If we define unemployment, then this is a natural consequence of the ongoing economic crisis and so that the crisis does not drag out, it is necessary to clearly implement labor laws [22-25]. But today's

realities are such that many employers, hiding behind the crisis, are committing significant violations of the labor code of the Russian Federation, in terms of the rights of employees. Repeated complaints by employees are related to non-payment of the amount owing to them, pressure on dismissal "of their own free will", part-time employment, leave without maintenance, dismissal of pregnant and maternity workers. The employer responds to the latest complaints that this category of women has social guarantees from the state, which is obliged to compensate them for all the risks, and they do not want



to keep a person who has occupied a full-time unit for 3 years. This fact is in no way connected with the state's plans to increase the birth rate [1, 13].

For almost 12 years now, crisis phenomena have been observed in our country. In these conditions, unemployment becomes stagnant and is closely related to economic difficulties arising in the family and passing on to society. The result of all this is growing social tension in society accompanied by robbery, robbery, theft, poor health, psychological condition and a decrease in the overall economic well-being of the nation [26-29].

Consequently, unemployment and the crisis deformation of employment has a negative trend, especially in rural areas, both for workers and their families, but above all for the economy and society as a whole, which directly affects the quality of labor potential. Of course, the option of continuing the crisis and further recession is not ruled out. As a result, a large number of jobs and, accordingly, skilled workers may be lost on the labor market, poverty will increase even more, and the quality of life will drop even more. Of course, the consequences will be a decrease in the birth rate, the cost of education and self-education of the family and children, a decrease in the cost of educating children, saving on health and further undermining the health and education of the nation as a whole [29-32]. That is, the beginning economic crisis is accompanied not only by a decrease in the quality and standard of living of the population, but also forms the future generation of workers who can go into the category of an under-educated generation of workers with poor health who will have to live in a "knowledge economy" [21]. Therefore, it is now necessary to take more effective measures to improve the quality of life of the population of the country in general and rural areas in particular [14].

The listed personnel problems indicate that the measures taken by the state to attract workers to agriculture are not effective enough. A survey of graduates of agricultural enterprises revealed the main factors that frighten potential agricultural specialists. According to graduates, their desire to work in rural areas is affected by:

- low material interest;
- poor state of rural social infrastructure.

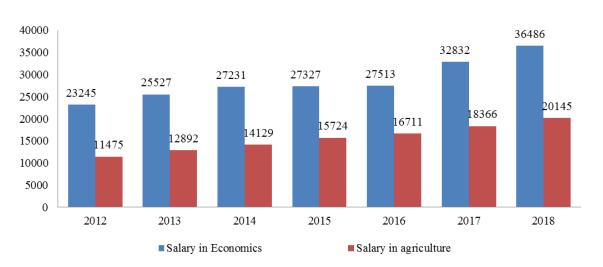


Figure 6. Average incomes of agricultural workers, rubles.

It should be noted that the average wage in the economy is 36,486 rubles, while in agriculture the

average wage is 20145 rubles. The figure clearly shows that the income of agricultural workers is more



than a third lower than the average wage for the country's economy (Figure 6) [3].

# **IV. CONCLUSION**

Thus, the study indicates that the formation and development of human capital in the context of the growing economic crisis occurs when there is a shortage of skilled workers caused by a number of demographic, social and economic problems. I would like to note that the development of human capital cannot be considered separately from the social and material needs of a person. A prerequisite for the reproduction of human capital is the satisfaction of the physiological, material and spiritual needs of man. If this does not happen, then human capital moves into another sphere of activity. In this regard, there is an urgent need to create in the agricultural sector the basic conditions for the development of human capital.

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