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# NEW APPROACHES TO HUMAN CAPITAL FORMATION IN RURAL AREAS UNDER PRESENT-DAY CONDITIONS

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### Abstract

The paper considers new approaches to the formation of human capital in rural areas in the context of systemic changes in modern society. The paper analyses the features of rural areas and their impact on the formation of human capital as well. The author focuses on a special nature of rural areas being a special type of sociocultural community, which is distinguished by historical features of formation, a special microclimate and relations within the community. Digitalization of all spheres of society, globalization and service sector development entail significant changes in the life of rural areas. The article analyzes the projects "Digital Economy of the Russian Federation" and "Digital Agriculture of the Russian Federation" aimed to transform agriculture by introducing digital technologies into production and management. Implementation of these projects requires a system for training highly qualified specialists capable to ensure the implementation of the basic principles of the digital economy, to introduce digital technologies into the production process and ready to do it. On the other hand, digitalization presents fundamentally new opportunities for rural areas development. Globalizations a trend in modern society creates conditions for the formation of human capital that meets the challenges of the world and Russian communities. The author highlights such approaches to the formation of human capital as the development of institutions of social and cultural infrastructure, the development of a competent system for investing in human capital, providing intellectual capital, a stable positive motivation for life and fruitful work in rural areas.

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# 1. Introduction

Modern society is a dynamic system. The ongoing changes cover all its spheres. The personnel issue is no exception.

Today, representatives of various fields of scientific knowledge are showing a justified interest in the formation of human capital in rural areas. However, despite this, modern science has not developed a unified approach to the concepts of "human capital" and rural areas.

# 2. Problem Statement

On the one hand, in the context of systemic changes in modern society the human capital of rural areas is formed with regards to the specific nature of rural areas, and, on the other hand, to the trends in social development. This results in a change in approaches to its formation. For sustainable development of rural areas, it is important to fully consider the challenges of the time.

### 3. Research Questions

By "human capital" we imply the totality of knowledge, skills and abilities of a person received in the process of training and professional activity and enabling to perform a certain work efficiently and productively, accumulated experience and personal qualities of employees, the level of their health as well as motivation to work and continuous learning. In the structure of human capital, it is customary to distinguish three levels: personal, microeconomic, macroeconomic. At the personal level, the concept under consideration includes such elements as knowledge, skills and abilities that a person received in the learning process or in the process of practical activity and which he needs to perform a specific job. The microeconomic level is represented by the qualifications and professional abilities of all employees of an organization. At this level, the concept "human capital" is identical to the concepts of "commercial capital" or "production capital". Within the framework of the macroeconomic level, human capital is considered on a national scale.

The formation of human capital is a purposeful process that occurs as a result of a whole range of serious investments (in education, development, upbringing, human health).

An important aspect of the issue under consideration is the versatility of the concept "human capital". In economic science, the following elements of human capital are distinguished: knowledge, competences, skills, abilities, experience, mastery, culture, motivation. There are also several types of human capital: health capital, cultural and moral capital, labor capital, organizational and entrepreneurial capital, intellectual capital.

Rural areas are today one of the most important components of the life of any state including not only significant economic potential but also demographic and cultural one (Menyaikin & Talanova, 2016). Competent and comprehensive use of this potential contributes to the socio-economic development of a certain territory in particular and a state as a whole.

In modern science, a unified approach to understanding the phenomenon of "rural area" has not yet been developed. The Concept of sustainable development of rural areas of the Russian Federation for

the period up to 2020 presents a generalized approach to the concept under consideration. It implies that rural areas are the territories of rural settlements and the corresponding inter-settlement territories (intersettlement territories are territories outside the boundaries of settlements) (Concept). Private interpretations of the concept "rural area" are presented in the works of Balandin (2013) (the rural area is a distinctive area inhabited by the rural population, with its natural and climatic conditions and resources, which allows the production of agricultural goods for solving the economic, social, environmental and institutional problems of the territory development), Panteleeva (2011), (the rural area is considered as a territorial system outside the border of large settlements with a low population density, which is constantly under the influence of local and regional authorities), Gromova (a rural area is a specific territorial entity built into natural and economic complexes, whose effective functioning is the basis for sustainable development of the rural economy and community at the local and regional levels) (Gromov, 2018) and others. Following Shumakova and Rabkanova (2014), by a rural area we mean a complex socio-economic, culturally distinctive area of existence and life of a rural community, designated by a territory outside urbanized spaces and including rural communities with their social and production infrastructure, enterprises, the surrounding natural landscape and the corresponding inter-settlement territories.

Thus, rural areas are complex formations, whose development depends on a number of external and internal factors. This concept is not identical to such concepts as "countryside", "village", "rural settlement", "agricultural area". At the same time, the interdependence of these concepts cannot be denied.

As noted earlier, the formation of human capital in rural areas, in particular, is due to their specificity. First of all, it is important to note that they play a leading role in the formation of the country's food base. In this part, we fully agree with Smirnova (2020), who believes that rural areas ensure food security and to some extent the national security of the state as well. A similar position is expressed by Irkhina and Khrestina. Researchers consider rural areas as the basis for the development of agricultural production being the core of the domestic agro-industrial complex. In this regard, rural areas play a significant role in the raw material supply for industry and food supply for the population (Irkhina & Khrestina, 2020; Yudina & Konovalov, 2019).

Rural areas represent a special type of socio-cultural community, which is distinguished by historical features of formation, a special microclimate and relations within the community.

In the majority of works, the image of the rural area is inextricably linked with agricultural production. However, for their sustainable development, it is extremely important to realize public goods, preserve and popularize the rural way of life, rural culture, and introduce new directions of development (for example, ecotourism). We fully agree with the researchers that the future of rural areas largely depends on the development of the non-agricultural sector of economy. A competent approach to this area will contribute to the formation of an attractive image of the territory for both young people and investors (Michurina et al., 2016).

Another feature of rural areas is the relatively weak level of engineering, social and cultural infrastructure development, specifically, an insufficient number of healthcare facilities, a low level of amenities, poor quality of drinking water, poor quality of roads, remoteness from central highways, and

so on. Ultimately, this leads to a significant gap in the standard of living of the urban and rural population and, as a consequence, the out-migration to the city. At the same time, the category of population mainly focused on out-migration is represented by the younger generation (Nikolaeva et al., 2019).

The life of rural areas in the conditions of modern society is undergoing significant changes. This is due to trends in social development, the key of which from our perspective is the digitalization of all spheres of society, globalization and the development of the service sector. Let us consider each of these trends in more detail and project them on the development of rural areas.

The digitalization of Russian society includes both the use of high-tech equipment and software and the introduction of modern business models and management tools into the production process (Dobrokhotov, 2020). This, in turn, creates conditions for the development of individual regions in particular and the state as a whole and contributes to the development of healthy competition motivating them to organize the most efficient economy.

Today, the Russian Federation is implementing two projects "Digital Economy of the Russian Federation" and "Digital Agriculture of the Russian Federation". They are aimed to transform agriculture by introducing digital technologies into production and management. Within the framework of the project "Digital Economy of the Russian Federation", it is planned to implement the following areas: normative regulation of the digital environment, personnel for the digital economy, information infrastructure, information security, digital technologies, digital government. The result of implementing these projects in relation to rural areas is the creation of a system for training highly qualified specialists who are capable and ready to ensure the implementation of the basic principles of the digital economy, to introduce digital technologies into the production process (Government decree of August 25 No. 996, 2017).

The implementation of the projects "Digital Economy of the Russian Federation" and "Digital Agriculture of the Russian Federation" within the framework of sustainable development of rural areas creates fundamentally new opportunities for their functioning. However, this process has a downside: economy digitalization increases the risk of information leakage and fraud, the expansion of the range and individualization of digital services lead to a decrease in control in the field of digital services (Grandonyan, 2018).

The globalization of modern society also affects the formation of human capital in rural areas. Considering the stated issue, two directions should be distinguished in the process of globalization and they are as follows: globalization of economy and education. The first direction sets challenges, the second one creates conditions for the formation of human capital that meets these challenges.

Globalization is a multifaceted process that affects political, economic, social and cultural processes. It is one of the factors determining the formation of a modern information society. Today, the role of electronic and mobile networks is significantly increasing, which results in the opportunity for rural areas to be included in national and even world economic relations, they get ample opportunities for sharing their own experience and studying the experience of other territories, opportunities for remote training of specialists. On the other hand, globalization makes specialists in all sectors of the economy to improve personally and professionally, master digital technologies, and have a desire to learn throughout their lives. The knowledge economy emerging under the conditions of the fifth and sixth technological

orders leads to the decrease of unskilled labor in the production process, and such an important resource as intelligence comes to the fore.

The processes of globalization universalize the requirements for the quality of human capital. Today a person needs such qualities as endurance, the ability to work with a large flow of information, process large amounts of data, make decisions in non-standard situations, make independent decisions, make an informed choice, they need psychological stability, creative thinking, high speed of reaction. These qualities must be systematically formed. This is facilitated by the close interaction of organizations of secondary vocational and higher education with production (practice-oriented and dual education).

Globalization of education contributes to the training of competent specialists with planet-scale competencies. The introduction of the world pedagogical and industrial experience into the educational process allows educational organizations to implement training in accordance with international requirements. However, this, in turn, entails certain difficulties. Specifically, rural areas must shape their image to be attractive to graduates. In addition, social and cultural infrastructure needs to be developed to attract young people. Otherwise, there is the threat of an ever-widening gap between rural and urban areas.

Active development of the service sector in a modern society also has a significant impact on the formation of human capital in rural areas.

It is important to note that in terms of the level of social and cultural infrastructure development, the majority of rural areas are inferior to cities of any type. This is one of the problems, which complicates the process of human capital formation. Even a small town is seen by young people as more attractive than rural settlements. The range of services provided to rural residents is much smaller than the range of services available to urban residents. One of the reasons for this situation is the staff shortage in the countryside as well as the relatively low population density and, as a consequence, the low level of demand.

# 4. Purpose of the Study

To reveal new approaches to the formation of human capital in rural areas against the background of modern society.

### 5. Research Methods

The methodological basis of the study is the key approaches and principles of modern science being a systematic approach and the principle of interdisciplinary. The application of a systematic approach made it possible to consider the studied phenomena from various angles.

The principle of interdisciplinary enabled to use the achievements of modern social sciences, which is necessary for conducting this kind of research.

# 6. Findings

The formation of human capital in rural areas in the context of systemic changes in modern society requires new approaches. The studied materials enable to single out the following approaches to the formation of human capital (Sokolova & Zakharova, 2019; Sokolova & Zakharova, 2020).

Today the concept of "human capital" is being transformed. Specifically, there is a shift in emphasis within the concept. Intelligence being the most important resource has aroused particular interest to the concept of "intellectual capital". The latter was developed in the last decade of the twentieth century but the growing role of qualifications in society led to the fact that it quickly found its followers.

Intellectual capital is one of the most difficult concepts in the field of management. It includes not only the competence of employees but also their desire to use these competencies as efficiently as possible to achieve goals in the professional sphere. The formation of the intellectual capital of an individual in particular and of an organization as a whole occurs throughout life and depends on a number of factors. Among them, one should highlight the socio-economic conditions, the professional status of a person, the rate of moral devaluation of knowledge, skills and experience of a person. Unlike other types of human capital, intellectual capital has the following characteristics: it does not collapse in value over time (for example, after the end of labor activity, a person's experience and knowledge remain important for other generations), acts as the main component of the consumer value of services, intellectual capital ensures the competitiveness of employees and, thereby, acts as a motivator for training and work, enables to perform more complex work in a shorter time frame (Shimshilov, 2004).

Due to the expansion of the range of economic activities in rural areas, it is necessary to purposefully form and increase their intellectual capital. For this, it is important to be systematically engaged in the selection of personnel, motivate and stimulate the team, create a comfortable moral and psychological climate. From psychological perspective, it is important for all employees to feel their relevance and importance, understand their contribution to the common cause. Another important stimulant is material incentives, namely, decent wages.

One of the problems being always relevant for rural areas is the poorly developed social and cultural infrastructure. Young professionals who have studied in big cities rarely express a desire to work in rural areas. Let us characterize the infrastructure of the considered type of territories using the example of the Tarsky municipal district of the Omsk region.

The Tarsky municipal district with the regional center in Tara is located in the north of the Omsk region and is the center of the northern economic region. The district is home to 45.1 thousand people, with 42% of the population living in rural districts. The economy of the Tarsky district is based on agriculture, forestry and woodworking industries.

The social infrastructure of the district is represented by educational institutions of all levels, healthcare institutions, institutions for organizing leisure and consumer services. Analysis of the current situation revealed the following. In 2018, 1,995 children attended preschool educational institutions, including 1,305 children in the city and 690 in the countryside, and now there is a steady shortage of places in preschool education. The number of students in secondary and basic schools and, accordingly,

the number of educational institutions is steadily decreasing: in 2016, there were 28 comprehensive schools in the district, in 2018 their amount was equal to 26. Public health institutions of the district are represented mainly by paramedical and midwifery station. The rural population can use the medical services of narrow-profile specialists or undergo a diagnostic examination only in the district or regional center.

The level of the leisure sphere also remains problematic. Only 36 town halls, 29 libraries and 5 museums function in the region.

The above-mentioned problems are especially acute for the population of rural settlements on the right bank of the Irtysh River due to the lack of roads. It is in these settlements that schools, trade facilities (over the last year, the number of retail outlets decreased by 2.2%), libraries are primarily closed. Ultimately, this leads to out-migration from the villages and their disappearance from the map of the area.

Simultaneously with the reduction of social infrastructure facilities in rural areas, the average area of their transport accessibility is enlarging. On the territory of the region there are roads of regional and inter municipal importance, they provide connection with rural settlements.

The stretch of public roads owned by the municipality is 824.8 km including the roads with an improved surface (126.9 km) and the ones with a hard surface (155.5 km). Analyzing the data, we can conclude that currently only 51.7% of the population of the rural areas of the Tara Municipal District has a high and average availability of social and domestic facilities, depending on the type of road surface. 40 settlements have poor road connection (54.8%).

The analysis of the changes taking place in the social infrastructure indicates that an ambiguous and contradictory situation has developed within its framework. Along with certain positive shifts, many negative phenomena became stagnant, and some problems worsened and began to pose a serious threat to the preservation of social stability and harmony in society.

One more new approach to the formation of human capital in rural areas is associated with the need to change the investment system. It is important to define the main parts of this system being education, healthcare, professional growth (professional retraining, advanced training programs, obtaining new specialties), creating comfortable conditions for work.

Proper investment in human capital contributes to the growth of productivity and competitiveness of individual enterprises and regions as a whole. This is especially true for rural areas. If the basis of the personnel structure of the territory is made by promising, creative, responsible people ready to learn and develop on a regular basis, then such a territory will have much more opportunities for development and economic growth.

A significant role in investing in human capital is played by a state and an organization, as well as a person. The state guarantees the general availability of public goods, creates conditions for training and retraining of a person, supports talented youth, encourages them to go in for sports, and so on. At the level of an organization, control is exercised over the timely professional development of employees, periodic medical examinations, cultural and sports events. However, the efforts of the state and a specific organization will be ineffective if a person is not interested in professional and personal growth, in constant self-improvement, does not have the desire to work in a highly qualified manner.

Among the new approaches to the formation of human capital in rural areas, the formation of sustainable positive motivation for life and fruitful work in rural areas should be included (Avlasovich et al., 2019). The formation of motivation is an extremely subjective process that primarily depends on the inner qualities and beliefs of a person. It is impossible to generate motivation in a short time. It is a process that covers most of a person's life. The formation of sustainable positive motivation is especially important for rural areas. This is due to the fact that when choosing a place of work, graduates are guided by the proximity and accessibility of social and cultural infrastructure, the presence of family and friends nearby, and the transport accessibility of the territory. And in these positions, rural areas are often inferior to cities. In order to invite highly qualified specialists to work in rural areas, you need to motivate them. This can be help in solving the housing issue, material incentives for young professionals, or career opportunities. It should be noted that today government programs that contribute to the development of human capital in rural areas, including those aimed to create sustainable motivation for young specialists (for example, the "Zemsky Doctor" Program or the "Zemsky Teacher" Program)are being implemented in Russia. It is also important to say about the educational component of motivation. It is necessary to constantly form a positive image of the rural area (the emphasis can be placed on the rich past or the natural wealth of the region).

It seems that digitalization and globalization of modern society arouse interest only in the younger generation being the most mobile, stress-resistant, ready-to-learn category of the population. In fact, this is not the case. The human capital of older generations is extremely important for the successful development of the state and its regions. This position is especially relevant for rural areas since they represent a fairly closely interacting community. In the rural community, relations between generations are more trusting and the authority of the older generation is usually higher.

Tuguskina offers two approaches to the participation of the older generation in the formation of the human capital of young people: structural capital (capital in the field of infrastructure and public services) and humanitarian capital (capital used in the creation of new human capital) (Tuguskina, 2009). Representatives of the older generation do not only share fundamental knowledge, vast professional and life experience but also show the importance of a responsible attitude to their work for the development of the region by their example.

In world practice as well as in Russian one, there is experience of mentoring according to both straight (from senior to junior), and reverse (from junior to senior) schemes. On the one hand, young specialists will adopt the experience available at the enterprise, and, on the other hand, they will train representatives of the older generation in modern technologies, including digital ones (Delitsyn, 2011). Such interaction, in our opinion, creates additional opportunities for the development of rural areas.

### 7. Conclusion

During the research, we came to the following conclusions. Human capital today is one of the most important resources for sustainable development of rural areas. In the conditions of a post-industrial society and a knowledge economy, the purposeful development of human capital and the developed system of investment in it are one of the most important factors in the socio-economic growth of a certain territory in particular and the state as a whole.

New approaches to the development of human capital allow introducing modern technologies into the life of rural areas, implementing innovative processes as well as increasing their competitiveness, forming a positive image in the public consciousness, especially among young people.

The key investment in the development of human capital today is investment in the education of specialists. Close interaction in the system "University (secondary specialized college) – enterprise" allows graduates to develop the required professional competencies that form the basis of the intellectual capital of an organization. Such cooperation also contributes to the formation of employees' motivation to improve the quality of their work and the desire to perform work responsibly and professionally. A high level of motivation entails self-realization, creating a situation of success, satisfaction from the work performed.

An important role in the formation of human capital today is played by the thesis "lifelong learning". The dynamics of modern society and the huge flow of information that a person encounters every day require the ability to analyze a significant amount of data, navigate a wide range of information, and be competent in various fields of science and industry. This is possible only if a person is ready to study regardless of profession, age, social status, and so on. To be a highly qualified specialist, it is important not only to have a specialty, experience and regularly take advanced training courses but also to study in professional training programs, in massive open online courses, to take part in forums and conferences. And here we should talk more about the initiative of the employee than the employer, since the desire and capabilities of the former determine the learning process. Acquisition of new professions and specialties, professional mobility of employees is one of the conditions for sustainable development of rural areas in a modern society.

The formation of human capital in rural areas is largely due to their specificity. Thus, a relatively poorly developed social and cultural infrastructure is one of the major obstacles in the process under consideration. The number and quality of objects included in the infrastructure not only determines the degree of comfort and the standard of living of the population but makes the image of the territory attractive or unattractive.

The use of new approaches to the formation of human capital in rural areas in the context of systemic changes in modern society is one of the conditions for the successful development of a state.

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