

### ORIGINAL PAPER

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## **Human Potential Reproduction in the Context** of New Challenges

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#### **ABSTRACT**

Subject. The article considers the evolution of human development theory under the auspices of the United Nations Development Programme (UNDP), and the factors influencing human potential reproduction.

Purposes. To compare the concepts of "human potential" and "human capital", existing tools for their assessment. Analysis of the specific features of Russia's human potential development and possibilities of its increase.

**Methodology.** In the article are used methods of quantitative analysis and cross-country comparisons, a systematic approach in the study of components of human potential.

Results. The author compared the content of the terms "human potential" and "human capital", which have many common meaningful elements, therefore they can be used in practice as synonyms. The analysis of human development dynamics in Russia highlighted the weaknesses and strengths of this process using the UNDP Human Development Index, Human Capital Index from the World Bank, and Global Human Capital Index from the World Economic Forum (WEF). Russia's lagging behind developed countries in some human development components requires an active demographic policy, modernization of health care and education, pensions and social assistance, development of cultural, formation of an efficient labor market and an innovation ecosystem.

**Prospects.** To improve the efficiency of measures aimed at the active reproduction of human potential it is necessary to continue improving the tools for estimating its components, which should be better aligned with the modern requirements of a rapidly changing technological structure of the economy.

Keywords: human potential; human development; human capital; educational process; motivation for innovation; labour potential; cost of human life

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### **INTRODUCTION**

At the end of the last century, Human Potential (HP) was recognized by the world community as the main factor in the formation of an innovative economy, the driving force of sustainable development and human progress. In Russia, at the state level, it has been declared the main strategic resource of innovative growth based on new technologies.

Within the current economic paradigm, the development of HP is one of the main conditions for increasing the competitiveness of the national economy.

The representation about the main role of economic growth as a measure of progress, which prevailed in the practice of social production until the second half of the 1980s, moved into the background (is still alive), where research under the human development approach is widely accepted. It was based on the understanding that economic growth, measured by the volume of material goods and services, is not an end in itself, but simply a means to improve the quality of life of people.

As a result, the United Nations Development Programme (UNDP) experts working on human development theory published their first report "Human Potential Development Report" (HPDR) in 1990. It presents the Human Potential Development Index (HPDI), which has since been calculated annually at the regional, national and international levels.

It is a composite, average of the standard of living and quality of life of a person in a country or region, which measures their achievements in the three main sub-indices:

- Life Expectancy Index: health and longevity as measured by average life expectancy at birth;
- Education Index: access to education, as measured by the average expected duration of education for school-age children and the average duration of education for adults;
- Gross National Income Index: decent standard of living, measured by gross national

income (GNI) per capita in U.S. dollars by purchasing power parity (PPP).

Since 2003 it is called "Human Development Index" (HDI), and the report — "Human Development Report" (HDR) without the word "potential", which did not correspond to the content of HDI indicators. In some countries, however, the index continued to be referred to as the Human Potential Development Index by inertia and the human development theory — as the concept of human development, although their content is not identical.

Three new indicators were introduced in 2010, in addition to the HDI composite indicator, which is based on country average statistics and does not take into account internal inequalities: Inequality-Adjusted Human Development Index (IHDI), Gender Inequality Index (GII) and Multidimensional Poverty Index (MPI).

Since 2020, UNDP experts taking into account the planetary load and social costs associated with carbon emissions and natural resources (HPDI) calculate HDI. It corrects the standard HDI to carbon dioxide emissions and per capita resource consumption for each country.<sup>1</sup>

The UNDP Human Development Index does not cover all the diversity of HP components that cannot be quantified more or less accurately.

# HUMAN POTENTIAL AND CAPITAL: SIMILARITIES AND DIFFERENCES

The content of the term "human potential" has been discussed since the 80s of the last centuries, but its generally accepted definition has not yet been found. Russian and foreign authors give a variety of interpretations of human potential, which is largely due to the complexity of the concept.

Amartya Sen, Nobel laureate in economics in 1998, whose work is the basis of the first

<sup>&</sup>lt;sup>1</sup> UNDP Report "Indices and Indicators of Human Development: Updated Statistics 2018".URL: https://hdr.undp.org/sites/default/files/2018\_human\_development\_statistical\_update\_ru.pdf

"Investment in human capital and personal

UNDP Human Development Report in 1990, identified HP countries as "sum total of the physical and spiritual forces of its inhabitants, which can be used to achieve individual and social goals — both instrumental, connected with the provision of the necessary living conditions, and existential, Including the expansion of human potency and self-realization" [1].

Most Russian scientific publications consider HP as a set of biological-physical, intellectual, spiritual and sociocultural properties, abilities and resources of an individual, social group, region or country. They are already formed or forming but have not yet been implemented in practical activities, and depending on different conditions and factors, may remain latent resources [2–8].

Within the framework of different approaches to the study of the HP (philosophical, economic, socio-economic, sociological, cultural, political, psychological, resource, activity, etc.), its structural elements are distinguished, most of which are not yet quantifiable.

N.M. Rimashevskaya identifies three main groups of structural components of HP:

- physical, mental and social health;
- professional and educational resources and intellectual potential;
- cultural and moral values, spirituality and socio-cultural activity of citizens [9].

Among the components of HP, intellectual, creative, communicative, value and activity potential are most often specified, which is connected with the transition to an innovative economy that requires people to new skills [10].

The concept of human potential is based on the development of the theory of human capital, which began a few hundred years ago, much earlier the appearance of the term "human potential". HC has been continuously transformed by new demands of technological progress.

The term "human capital" was first used by Jacob Mincer in 1958 in his article

income distribution" [11]. The HC received international recognition in modern interpretation in 1960, when Theodore Schultz, a Nobel laureate in economics in 1979, defined its main characteristics: it is the totality of the most valuable human qualities inherent in the individual, as well as an additional source of income, which is created through the knowledge, skills, abilities of the person. While, education — is the most important factor for economic growth and at the same time — a source of future satisfaction and (or) earnings. Additional investment in education is needed to improve the quality of the labour force, which is a factor of production that generates a surplus product. Education capital — is human capital because it is inseparable from the human [12].

Nobel laureate in economics in 1992 Harry Becker, developing the ideas of his colleague, argued that HC (knowledge, skills, motivation, etc.) is formed by investing in people, among which he highlighted education, professional experience, health, geographical mobility, search for information [13].

These investments, measured in monetary terms, contribute to the development of human labour, intellectual and cultural potential.

In the XXI century, the Organization for Economic Cooperation and Development (OECD) and Economic Commission for Europe define human capital almost equally as inherent in individuals' quality of knowledge, competencies, qualifications, skills, etc., which are important for economic activity and contribute to personal and public welfare.<sup>2</sup>

The World Bank Group has been implementing its new Human Capital Development Project (HCDP) since 2017 to compensate for the lack of policy incentives and provide incentives to invest

<sup>&</sup>lt;sup>2</sup> OECD Review Report "Measuring Human Capital: Leading Initiatives and Future Challenges". URL: https://unece.org/fileadmin/DAM/stats/documents/ece/ces/2013/5 R .pdf





in HC. As part of the project in 2018, the first version "Human Capital Index" (HCI) was calculated.

This index consists of several components: survival probability of children under five years of age, expected duration of studies for children, unified exam scores as an indicator of learning quality, survival of adults (proportion of 15-year-olds today who will live to 60) and percentage of children without developmental delays.

This indicator measures the productivity of the next generation of employees from 0 to 100% and means that the productivity of a person born in a year of HCI measurement, when he/her grows, it will be as a percentage of the benchmark for decent nutrition, full-time education and good health. Globally, a child born in 2020 can expect to achieve 56% of the productivity that it could achieve when it grows.

At the same time, the components of the index are represented as productivity contributions relative to the situation of full school level and health. In this case, the HCI does not take into account the quality of higher and additional education during life, the level of development of social skills, competencies, etc.

However, HCI analysis shows that in countries with the lowest levels of human capital investment at the moment, the productivity of the next generation of workers will be one third or even half lower, what could be if people were perfectly healthy and received a quality education.

The HC structure distinguishes its different types: biomedical, labour, organizational-entrepreneurial, intellectual, cultural and moral capital, etc.

It is necessary to note some terminological differences in Russian and foreign scientific works. On the one hand, experts of the Analytical Centre under the Government of the Russian Federation regularly prepare reports on human development in Russia, similar to the reports of the United Nations

Development Programme, on the other hand, a number of domestic researchers, including ISEPP RAS, consider that the Russian term "human potential" is substantially more precise than the term "human development" used by the UNDP [14].

Human potential, which has a latent character, is realized not only in the socioeconomic sphere, so in Russia it is studied in an extended interpretation by various sciences about the person. Receive income—is only one of the needs of a person who, in some cases, constructs a more complex system of life priorities.

Comparing the concepts of "human potential" and "human capital" is detected a number of differences and contradictions.

For example, proponents of human capital theory argue that investment in education — is the most important factor for economic growth, and human researchers respond by saying that education — is potential, which, for various reasons, may become capital, although more so for individuals than for regions or countries. The question remains a tricky one.

"The paradigm of human potential differs from the paradigm of human capital by the priority of humanistic approaches over utilitarian pragmatic attitudes and increased sensitivity to cultural-historical, sociocultural, cultural and psychological factors in the development of educational modernization programmes and strategies" [15].

Concepts of "human development", "human potential" and "human capital" have common content elements, but differ in formation, structure and application. They are united by the recognition of human development as the main goal and means of social progress.

Investment in the development of HC contributes to the accumulation of HP, so when discussing investment in human development, the author uses the concepts of "human potential" and "human capital" as synonyms.



The human potential of Russia is characterized by extremely different assessments of part of its individual components. The need to build human capital is officially recognized by the Russian government in the developed and approved "Concept long-term social-economic development of the Russian Federation up to 2020" in 2008. As one of the answers to the long-term systemic challenges of the Russian economy "Concept-2020" implies overcoming the existing negative trends in human potential development, which are characterized by:

- population decline and level of employment in the economy;
- growing competition with European and Asian markets for qualified personnel;
- poor quality and low accessibility of social services in health and education.
- Human potential development involves two types of systemic transformation:
- increasing the competitiveness of human resources, labour and social sectors of the economy;
- improving the quality of people's social environment and living conditions.

They cover medium- and long-term objectives, priorities and main directions of population policy, policies of modernization of health and education, development of pension and social assistance, development of culture, creation of efficient labour and housing markets.<sup>3</sup>

Note that in the text "Concept-2020" the terms "human potential" and "human capital" are used as synonyms.

According to experts, the average level of implementation of measures laid down in "Concept-2020" was only 29.5%. The percentage of fully implemented measures was only 6.8%, mostly improving organizational

innovations, technical solutions, but not reforms and fundamental changes that meet real challenges.

At the same time, experts recorded a high level of imitation of reforms, formal implementation of measures and instructions. According to their estimates that few measures have been implemented without attempting to distort their principles. However, there is progress as "Strategy-2010" is only 39%.<sup>4</sup>

Adopted on the basis of "Concept-2020" in December 2011 "Strategy-2020" also had no success: none of its macroeconomic indicators has not been fulfilled, due to the 2008–2009 crisis, demographic situation and other negative factors. There were also problems of forecasting, which at that time was largely declarative, contained a set of good intentions and general recommendations that were not closely related.

After the introduction of sanctions against Russia and the start of the COVID-19 pandemic, the HP investment goals and targets were postponed to 2024 and then to 2030.

"Saving the people of Russia and human potential development" is at the forefront of the updated national strategic priorities "National Security Strategy of the Russian Federation" in 2021, ensuring and protecting the national interests of the Russian Federation.<sup>5</sup>

In "Economic security strategies of the Russian Federation until 2030", adopted in 2017, the decline in the quality and availability of education, medical care and, as a consequence,—the quality of human potential is included among the main challenges and threats to Russia's economic security.<sup>6</sup>

According to the results of the intercountry comparison published in the 30<sup>th</sup> anniversary Human Development Report 2020 UNDP, Russia ranks 52<sup>nd</sup> out of 189 countries with

 $<sup>^6</sup>$  URL: http://static.kremlin.ru/media/acts/files/0001201705150001. pdf



<sup>&</sup>lt;sup>3</sup> Concept long-term social-economic development of the Russian Federation for the period up to 2020. URL: http://static.government.ru/media/files/aaooFKSheDLiM99 HEcyrygytfmGzrnAX.pdf.

<sup>&</sup>lt;sup>4</sup> URL: http://2035.media/2017/09/27/strategy2020-part1

<sup>&</sup>lt;sup>5</sup> URL: http://2035.media/2017/09/27/strategy2020-part1



0.824 after Montenegro, Romania, the Republic of Palau and Kazakhstan. In this report, states are ranked according to the Human Development Index (HDI) calculated on the basis of 2019 statistics.<sup>7</sup>

Such a strong position in the HDI world ranking Russia is solely due to the high level of education of the population, but significantly lags behind the European states on two other indicators: life expectancy and per capita income. For example, life expectancy at birth in Russia is 72.6 years, with an average of 79.6 years in a group of countries with very high levels of human development.

For a quarter of a century, the level of human development in Russia has grown significantly: in 1995 according to HPDI, the country was on the  $114^{\rm th}$  place out of 174 countries with 0.701, in 2006 — already on the  $73^{\rm rd}$  (0.752). After 2009, the growth rate declined slightly, as in many other countries of the world, but HDI in Russia continued to rise until the COVID-19 pandemic.

According to preliminary estimates, UNDP, the 2020 HDI drop is equivalent to seven years of progress, as COVID-19 struck a triple blow to health, education, and income, causing a decline in human development worldwide.<sup>8</sup>

According to the Human Capital Index-2020 (HCI) of the World Bank, Russia ranked 41st out of 174 with a score of 68% against a world average of 56%. The index was calculated using data from March 2020, so it reflects the impact of the COVID-19 pandemic on the HC level. In 2018, Russia ranked 34th with 73%.

Nevertheless, the Russian Federation is among the 10 countries in the world that have achieved the best human capital development indicators in the last 10 years: our country's HCI value increased from 60% to 68% between 2010 and 2020.

The global average "Global Human Capital Index" by World Economic Forum (WEF) in 2017 was 62%, Russia scored 72.2% and took the 16<sup>th</sup> place out of 130, that the average is lower than North America, but higher than Western Europe (including the UK, Ireland, and France), and Japan, South Korea, and Israel.<sup>10</sup>

The World Bank estimates that human capital in Russia accounts for the largest share of the country's total wealth -46%; While this share is much lower than the OECD average (70%). Next are produced capital (33%), natural capital (20%) and net foreign assets (1%).

Between 2000 and 2017, HC per capita increased rapidly and by 80% in Russia. Russia is surpassed the OECD and commodity-exporting countries in HC growth per capita. However, the average annual growth rate of HC declined from 4.7% in 2000–2010 to 1.8% in 2010–2017. If Russia's average human capital growth rate of 2000–2017 is maintained (3.5%), it would take about 50 years to catch up with the OECD countries; with a lower growth rate (1.8%), Russia could catch up in almost 100 years. Despite significant growth in HC, its per capita wealth in Russia is one fifth of the OECD average.<sup>11</sup>

The above cross-country human capital development indices have their restrictions and disadvantages. For example, they provide mostly quantitative macro-indicators of countries and regions and do not address the meso- and micro-level, as well as qualitative parameters. At the same time, the annual international rankings of HP and HC allow to analyze the state and dynamics of human development, as well as the quality of social policy in each individual country.

<sup>&</sup>lt;sup>7</sup> URL: https://hdr.undp.org/sites/default/files/hdr\_2019\_overview\_-\_russian.pdf

<sup>8</sup> URL: https://ac.gov.ru/news/page/padenie-indeksaceloveceskogo-razvitia-v-2020-godu-ekvivalentno-semi-godamprogressa-27118

<sup>9</sup> URL: https://openknowledge.worldbank.org/bitstream/ handle/10986/34518/211643RU.pdf?sequence=5

 $<sup>^{\</sup>rm 10}$  URL: https://www.weforum.org/reports/the-global-human-capital-report-2017

<sup>&</sup>lt;sup>11</sup> URL: https://www.vsemirnyjbank.org/ru/country/russia/publication/how-wealthy-is-russia

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### POSSIBLE HP INCREMENT PATHS

The high importance of human potential for the emergence of a sustainable innovation economy based on knowledge- intensive and high-technology industries that increase the competitiveness of the country is widely recognized.

UNDP experts defined general directions of HP development and proposed ways to optimize the relationship between economic growth and human development:

- increased investment in education, health, training, promotion of human capabilities and participation in production and distribution;
- more equitable distribution of income and wealth, providing a material basis for human potential development;
- balancing social expenditures, fully strengthening the economic base of the social sphere;
- expand the possibility people to exercise their political, social and economic choices, with special attention to groups (particularly women) whose opportunities are limited for various reasons.<sup>12</sup>

The main obstacle to HP reproduction — is the low motivation of governments and different groups to invest in HP accumulation and quality improvement. World Bank in "World Development Report 2019" documented an absence of political incentives as one of the reasons why governments do not invest in human capital: "Because investment in human capital may not have economic returns for years, politicians usually try to find faster ways to improve their reputation... The bureaucracy responsible for implementing human capital formation policies is often not able or motivated to do so effectively".

When governments are ready to invest in HP, they prefer to invest in politically visible components of HC, such as building schools and hospitals, and much less in — its intangible aspects, Improving the quality

and qualifications of teachers and health workers.

The World Bank group (WB) has been implementing the "Human Capital Development Project" (HCDP) since 2017 to compensate for the lack of political incentives and create incentives for investments in HC. In particular, WB experts consider that accurate measurement of HCI, such as education and health outcomes, raises awareness of the need to develop human capital at the local, national and global levels. Such measurements provide the basis for research and analysis to develop policy measures that improve the quality of HC.<sup>13</sup>

Many decision makers recognize the importance of human development in words, but are not ready to invest in it. The reluctance to increase social spending on HC policies is often justified by the fact that it constrains economic growth, but studies from a number of successful countries suggest otherwise. Even when Governments and voters are aware of the importance of the multidimensional issue of human development, they may disagree on priorities for addressing it.

In one article it is almost impossible to reveal the content of all directions of human potential reproduction. Therefore, the main attention of the author is focused on the problems of innovative, educational and labor components of HP.

The current goals of innovation and digital development include the creation of new and modernization of existing technologies, the introduction of original management systems and business models that forming the sustainable economy of the future. In our country, the process is steadily but is uneven in different value chains.

On the one hand, Russia lags far behind the world's advanced countries in the creation of new technologies and investments, especially venture capital. Demand for innovation remains low, although the country has a broad infrastructure for innovative development. In

<sup>12</sup> URL: http://hdr.undp.org/

<sup>&</sup>lt;sup>13</sup> URL: https://www.vsemirnyjbank.org/ru/publication/wdr2019

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the next 14<sup>th</sup> issue of the Global Innovation Index (GII), published on 20 September 2021, Russia's innovative ecosystem ranked 45<sup>th</sup> among 132 countries, rising two positions relative to 2020 due to increased performance in all areas of science, innovation and creativity.

On the other hand, in the rating of GII 2021, Russia ranks higher, for example, among the top 20 countries in the quality of the entire higher education system, ranked 16th in the number of patent applications for inventions, although the level of introduction of scientific developments and inventions remains very low.<sup>14</sup>

Also, Russia creates favorable conditions and infrastructure for the development of new technologies, especially information and communication (IC), such as the Internet and mobile communication. In the rating of quality and availability of the Internet Russia takes the 9<sup>th</sup> place out of 131, the level of availability of mobile Internet — the 2<sup>nd</sup> place among the 50 countries with the largest GDP. With this cheaper than in Russia, the Internet is costs only in India.<sup>15</sup>

The gap between low innovation performance and high innovation potential is due to weak demand for innovation from corporations and entrepreneurs, which in Russia, as in some other countries, are either afraid of risk or are not provided with resources for the long-term return on venture investment (VI).

In addition, in the Russian economy, poorquality competitive environment significantly reduces the motivation of enterprises, stimulating innovation and introduction of innovation. In such circumstances, competition is not for the consumer, but for access to state resources and limiting this access to competitors [16]. In 2021, the Russian venture capital market grew almost 3.5 times — from 24.9 to 85.2 billion rubles.<sup>16</sup>

The emergence of breakthrough technologies and innovations can be accelerated by effective management of human capital, development of new skills and competencies of personnel of different qualifications.

World Bank experts consider that three types of skills are increasingly important in labour markets: cognitive (e.g., complex problem solving), social behavioral (e.g., teamwork) and those that predetermine adaptability (e.g., logical thinking and self-confidence).<sup>17</sup>

In Strategies for innovative development of the Russian Federation until 2020 noted that "one of the main tasks of innovative development is to create conditions for the formation of the following competences of innovation activity among citizens: ability and readiness for continuing education, continuous improvement, retraining and self-study, professional mobility, the desire for new; ability to think critically; ability and willingness to reasonable risk, creativity and enterprise, ability to work independently, readiness to work in a team and highly competitive environment; proficiency in foreign languages, involving the ability to communicate freely in everyday life, business and professions. The formation of such competences implies the adaptation for these goals of more than just individual socio-economic policies <...>, but also the public environment as a whole, creating conditions for the freedom of creativity and self-expression, encouraging and rewarding people with

<sup>&</sup>lt;sup>14</sup> World Intellectual Property Organization (WIPO). "Global Innovation Index (GII) 2021". URL: https://www.globalinnovationindex.org/gii-2021-report

<sup>&</sup>lt;sup>15</sup> RBC. Russia entered the top ten rating of internet quality and availability. URL: https://trends.rbc.ru/trends/social/cmrm/613eea0f9a7947a3178b11b

 $<sup>^{16}</sup>$  RBC. URL: https://trends.rbc.ru/trends/innovation/61c039b19a7947635587c04d.

<sup>&</sup>lt;sup>17</sup> World Bank. 2019. World Development Report 2019 "Changing the nature of work". Washington, D.C.: World Bank. DOI: 10.1596/978–1–4648–1328–3. License: Creative Commons Attribution CC BY 3.0 IGO URL: https://www.vsemirnyjbank.org/ru/publication/wdr2019.

relevant competencies and achieving success". 18

Formation of such qualities of human potential requires modification of all forms and technologies of educational processes at different stages of human life with mutually beneficial partnership of the state, science, production and society.

Existing inconsistencies between the education system and labour market needs leave some graduates who are forced to work outside the profession or relearn. This reduces the motivation of youth for education.

System of higher education and vocational training requires a better balance of labour supply and demand to meet the needs of the economy, as well as better coordination and practical interaction between different levels of education. In particular, the existing mechanism of targeted training with employers needs to be improved.

Forced mass and accelerated introduction of digital technologies and distance learning in 2020, despite all the shortcomings and costs, significantly increased the access of pupils and students to various information resources, that offers unprecedented opportunities for self-development with appropriate motivation.

The problem today is that in Russia, only 3% of all innovative start-ups are born in universities, while in the world this figure is 25%. Therefore, during the strategic initiative "Platform of University Technological Entrepreneurship" it is planned to create at least 30 thousand university start-ups and 150 thousand jobs.<sup>19</sup>

The structure of the educational process increases the number and the content of practical classes, focuses on the participation of students in innovative entrepreneurial activities through the implementation of real innovative projects within start-ups or small

innovative enterprises (SIE). The success of such initiatives depends to a large extent on the demand from investors for innovative projects.

The main problem is that human capital degrades if it is not needed in the market of highly skilled labor, entrepreneurial or creative activities.

Hence the need to form the requirements to develop high-quality (high-productivity and high-paid) labour resources for the innovative economy. But it is necessary to significantly improve the interaction of the education system and the labour market. In particular, it is necessary to address the employment and adaptation of graduates of universities, colleges and technical colleges, to reduce the outflow of scientists and qualified specialists.

Excessive bureaucratization of the socioeconomic sphere severely limits the creative abilities and development of HP and HC. Consumer society values spread in Russia also do not contribute to the formation of a creative personality, motivation for innovation and acquisition of knowledge, competencies and skills of investment activities. In contrast, it is necessary to create a system of social lifts for the most capable and talented people, which will show society their success stories as a social benchmark for choosing a life strategy and role model.

This will not compensate for the low demand for highly skilled labour, but will increase the number of people targeted for innovation and thereby increase human potential, as well as human capital, if talents, competencies and skills of motivated innovators are successfully implemented in the socio-economic sphere.

Russian researchers of HC rarely pay attention to such an important characteristic as the cost of human life, perhaps on moral grounds, because human life is priceless. On the contrary, however, the abandonment of the topic in developing countries devalues human life, which is reflected in the very low compensation for the families of people who

<sup>&</sup>lt;sup>18</sup> Strategy of innovative development of the Russian Federation until 2020 (approved by the Decree of the Government of the Russian Federation No. 2227 from 08.12.2011). URL: http://government.ru/docs/9282/

<sup>19</sup> URL: https://tass.ru/ekonomika/12603543.

have died as a result of accidents, disasters or industrial accidents, in the workplace or other emergency situations.

Experts of the Financial University under the Government of the Russian Federation, using one of the existing methods, calculated the cost of human life in Russia, taking into account the moral damage in early 2018, which rose to 46.9 million rubles (825 thous. USD at the rate of that time) from 39.3 million rubles in 2015.

By comparison, in the United States, different methodologies estimate the human cost of living in the range of 7 to 37 million USD. In 2016, the U.S. Department of Transportation set the cost of living at 9.6 million USD, while in Bangladesh it was only 5.2 thous. USD [17].

At the same time, in Russia compensation for victims and their families in cases of industrial accidents, transport, etc. is several times lower than the scientific assessment of the cost of human life, moral damage is rarely taken into account.

This does not contribute to an understanding of the value of human life, leads to insufficient funding of safety measures at work and at home, as well as education and health, which inhibits the development of HC and active innovation of the state and business.

### CONCLUSION

Reproduction of human potential determines the nature of the future development of the country and serves as a qualitative characteristic of the social policy of the state.

Annual publication of HP and HC quality benchmarking contributes to a better understanding of human development, to some extent influences the political motivation to invest in the social sphere, especially in education, health, science, culture, etc.

Many decision makers are aware of the importance of investing in HP and recognize the importance of human development in strategic concepts at the national and regional levels, but are not prepared to invest in it, since the benefits of these costs will accrue

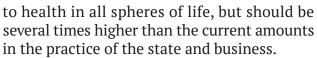
mainly to the younger generation. From a practical point of view, the substantive proximity of the multi-component terms "human potential" and "human capital" reduces the value of many Russian studies to find differences between them and allows them to be used as synonyms. For example, investments in education and health actually increase both HP and HC.

Human capital is degraded if it is not needed in the highly skilled, entrepreneurial or creative labour market, so the interaction between the education system and the labour market should be significantly improved.

Russian higher and secondary specialized education lags behind in the creation and regular updating of the content of the educational process and the introduction of skills and competencies required by the innovative economy. On the contrary, education should be ahead of production requirements, i.e. provide graduates with knowledge of the most advanced technologies and innovations that have not yet been widely applied. In this way, educational institutions will create a zone of near-term development of high-tech production, encourage employers to create high-productivity jobs.

To develop innovative potential, it is necessary to stimulate the interest and motivation of young people to innovate, to improve the culture of creativity and innovation in corporate governance and society at large. Societal orientations of innovation can spread when society is presented with an attractive and understandable image, a desired future.

The minimum cost of living concept introduced at the legislative level for Russians, which is used in cases of compensation for families of people, could really stimulate the development of HC in Russia, Persons who died as a result of accidents, disasters or industrial accidents, in the workplace or in other emergencies. Minimum cost of living estimates can be calculated for different industries and cases of loss of life and damage



Further research may focus on improving HP and HC performance. In addition, the

efforts of scientists and experts can be linked to the examination of sectoral requirements for human quality, as well as the impact of demographic and migration factors at the country and regional levels.

#### **REFERENCES**

- 1. Sen A. Development as capability expansion. *Journal of Development Planning*. 1989:19:41–58. DOI: 10.1007/978–1–349–21136–4 3
- 2. Bodak A.V. Human potential as a basic model for the development of society. In: Proc. 20<sup>th</sup> District scientific social readings (Surgut, October 29–30, 2015). Surgut: Methodological Center for the Development of Social Services; 2015:15–20. (In Russ.).
- 3. Bulanov V., Kataytseva E. Human capital as a form of human potential demonstration. *Obshchestvo i ekonomika = Society and Economy*. 2011;(1):13–22. (In Russ.).
- 4. Doktorovich A.B. On the protection and upgrowth of human potential. *Prostranstvo i vremya = Space and Time*. 2011;(4):125–130. (In Russ.).
- 5. Zaslavskaya T. N. Human potential in the modern transformational process. *Obshchestvennye nauki i sovremennost' = Social Sciences and Contemporary World*. 2005;(3):5–16. (In Russ.).
- 6. Ivanov O. I. Human potential: Issues of theory and research methodology. *Sotsiologicheskie issledovaniya* = *Sociological Research*. 2014;(6):89–95. URL: https://www.socis.isras.ru/files/File/2014/2014\_6/Ivanov.pdf (In Russ.).
- 7. Lapshin V.A. The structural components of human potential. *Znanie. Ponimanie. Umenie = Knowledge. Understanding. Skill.* 2013;(1):259–263. URL: https://cyberleninka.ru/article/n/strukturnye-komponenty-chelovecheskogo-potentsiala (In Russ.).
- 8. Soboleva I.V. Human potential of the Russian economy: Problems of preservation and development. Moscow: Nauka; 2007. 202 c. (In Russ.).
- 9. Rimashevskaya N. Quality of human potential in today's Russia. *Bezopasnost' Evrazii = Security & Eurasia*. 2004;(1):14–32. (In Russ.).
- 10. Chekmareva E.A., Ustinova K.A., Likhacheva T.N. Theoretical and methodological approaches to human potential research of rural areas. *Problemy razvitiya territorii = Problems of Territory's Development*. 2017;(4):96–111. URL: http://library.vscc.ac.ru/Files/articles/1501677727 96111.pdf (In Russ.).
- 11. Mincer J. Investment in human capital and personal income distribution. *The Journal of Political Economy*. 1958;66(4):281–302. DOI: 10.1086/258055
- 12. Schulz T. W. Capital formation by education. *Journal of Political Economy*. 1960;68(6):571–583. DOI: 10.1086/258393
- 13. Becker G. S. Investment in human capital: A theoretical analysis. *Journal of Political Economy*. 1962;70(5. Pt.2):9–49. DOI: 10.1086/258724
- 14. Rimashevskaya N. M., Bochkareva V. K., Migranova L. A., Molchanova E. V., Toksanbaeva M. S. Human potential of Russian regions. *Narodonaselenie = Population*. 2013;(3):82–141. (In Russ.).
- 15. Asmolov A. G., Guseltseva M. S. Value sense of sociocultural modernization of education: From reforms to reformation. *Vestnik RGGU. Seriya: Psikhologiya. Pedagogika. Obrazovanie = RSUH/RGGU Bulletin. Series: Psychology. Pedagogics. Education.* 2019;(1):18–43. (In Russ.). DOI: 10.28995/2073–6398–2019–1–18–43
- 16. Varushchenko A.A., Vladimirov N.A. The state and the prospects of the development of innovative activity in the Russian Federation in the XXI century. *Statistika i ekonomika = Statistics and Economics*. 2021;18(2):34–44. DOI: 10.21686/2500–3925–2021–2–34–44
- 17. Zubets A.N., Novikov A.V. Quantitative assessment of the value of human life in Russia and in the world. *Finance: Theory and Practice*. 2018;22(4):52–75. DOI: 10.26794/2587–5671–2018–22–4–52–75





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