Research article

DOI: https://doi.org/10.48554/SDEE.2024.1.3

Management of Socioeconomic Development: National Planning and Its Impact on the Human Development Index in Russia

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Abstract

This research focused on the quality assessment of national project management in the Russian Federation as one of the most significant tools aimed at implementing an effective policy for socioeconomic development. The hypothesis was that increased investment in national programmes and their prioritisation in the framework of public administration could improve socioeconomic development in Russia. The human development index (HDI), which directly assesses the level of human development in different countries based on indicators such as life expectancy, education, and well-being, shows this level. This research aimed to assess the efficiency of Russian socioeconomic programmes based on an independent analysis of the HDI. The authors highlight the urgent need for improvement and articulate the range of potential challenges and solutions through a statistical analysis of the correlation between the HDI and indicators of project management costs in Russia and a regression evaluation of project implementation indicators. When implemented, these recommendations can improve the spending efficiency of federal funds, estimated at 8.5 trillion rubles, as well as regional and local funds allocated for executing national projects.

Keywords: socioeconomic development, innovation, national planning, national projects, human development index

Citation: Volodin, A., Degtereva, V., 2024. Management of Socioeconomic Development: National Planning and Its Impact on the Human Development Index in Russia. Sustainable Development and Engineering Economics 1, 3. https://doi.org/10.48554/SDEE.2024.1.3

Научная статья

УДК 351.8

DOI: https://doi.org/10.48554/SDEE.2024.1.3

Государственное Планирование Управления Социально-Экономическим Развитием и Его Влияние на Индекс Человеческого Развития в России

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Аннотация

В основе данной части лежит анализ качества государственного проектного управления в Российской Федерации, как одного из наиболее значимых инструментов реализации политики эффективного социально-экономического развития. Рассматривается гипотеза о том, что увеличение вложений в инструмент государственных программ и выделение его в общей схеме государственного управления является значимым фактором улучшения уровня социально-экономического развития России, выраженного в индексе человеческого развития, который непосредственно оценивает уровень человеческого развития в разных странах на основе таких показателей, как продолжительность жизни, образование и благосостояние. Целью работы является оценка эффективности проведения государственных программ по улучшению социально-экономического положения России на независимую оценку данного развития. В результате проведенного статистического анализа корреляции индекса человеческого развития и показателей затрат на проектное управление в России, а также регрессионной оценки показателей выполнения проектов, авторы приходят к выводам о необходимости их серьезной доработки и формируют перечень проблем и точек роста. При реализации предложенных авторами рекомендаций следует ожидать с экономической точки зрения улучшения эффективности трат средств федерального бюджета, оцениваемых в 8,5 трлн. рублей, а также средств регионального и местного бюджета, определяемых для исполнения национальных проектов.

Ключевые слова: социально-экономическое развитие, инновации, государственное планирование, национальные проекты, индекс человеческого развития

Цитирование: Володин, А., Дегтерева, В., 2024. Государственное Планирование Управления Социально-Экономическим Развитием и Его Влияние на Индекс Человеческого Развития в России. Sustainable Development and Engineering Economics 1, 3. https://doi.org/10.48554/SDEE.2024.1.3

1. Introduction

This research assessed the quality of public project management in the Russian Federation as one of the most significant tools for implementing an effective policy for socioeconomic development. The leading hypothesis was that increased investment in national programmes and their prioritisation in the overall framework of public administration could improve the level of socioeconomic development in Russia, as expressed by the Human Development Index (HDI).

This research aimed to assess the efficiency of Russian socioeconomic programmes based on an independent analysis of the HDI. In Russia, the blueprint for socioeconomic development is based on the system of the National Projects of the Russian Federation, approved by the Presidential Council for Strategic Development and National Projects on December 24, 2018. The system of projects is classified as type 3 in the state's socioeconomic policy, which is the development of conditions that allow citizens to have the opportunity to eliminate economic inequality.

Researchers worldwide have addressed issues of quality in the management of several projects related to interorganisational knowledge. Researchers from Finland have focused primarily on strategies, resources, management, and training (Martinsuo, Ahola, 2022). Those from South Africa (Silvius, Marnewick, 2022) and Europe (Todorov, 2014) have also considered the conceptual framework and the importance of sustainability in organisational strategy and project management.

The scientific literature often raises issues of economic development in regions and states, for instance (Skhvediani, Kudryavtseva, 2018; Demidenko, Kulibanova, Maruta, 2018; Didenko, Skripnuk, Mirolyubova, 2018). Many studies have been devoted to detecting additional ways of increasing economic efficiency. The article by Rudskaya and Rodionov (Rudskaya, Rodionov, 2018), in particular, lists the development of human potential (Rodionov, Kudryavtseva, Skhvediani, 2018; Shabunina, Shchelkina, Rodionov; 2018) and the improvement of housing (Zaborovskaia, Plotnikova, 2016) among the solutions that can ensure regional economic growth. However, they do not address problems that arise in the digital development of society to invite proportional growth.

Moreover, economic analysis often emphasises neural networks. For instance, Babkin et al. (Babkin, Karlina, Epifanova, 2015) stressed them. However, they did not focus on these tools' applicability to the state apparatus; they also observed ex ante and ex post approaches (Degtereva, Ivanova, 2018). Economic modelling is commonly applied to help effectively predict a region's future development, the associated problems, and how to manage them (Rudskaya, Rodionov, 2017; Sokolitsyn, Ivanov, Sokolitsyna, 2017). Simultaneously, developed economic models can be used for environmental assessments (Shabunina, Shchelkina, Rodionov, 2017). However, one must consider that many models created to improve the socioeconomic conditions in the Russian regions following the innovations defining their development (Rudskaia, 2017; Rodionov, Rudskaia, Degtereva, 2020) often neglect solutions to existing problems. For example, the scientific literature emphasises citizens' social development separately to create a balanced demand in the regional economic system (Farvaque, Mihailov, Naghavi, 2012; Stroeva, 2016).

Issues of digitalisation of the economy are common in business, but in the public sector, they tend to be neglected and, in practice, the issue of digitising the state apparatus is not prioritised. Simultaneously, many scientific papers theoretically address the problems of digitalisation at the societal level, for instance, Bataev and Plotnikova's study. They discussed the upsides and effectiveness of digital banking, assessed its inaccessibility among the middle aged and the elderly, and the risks that they are likely to encounter when attempting to use it, which younger generations do not (Bataev, Plotnikova, 2019). However, the digital component in economic assessments is reduced to the level of enterprises in different areas. For example, Demidenko, Kulibanova, and Maruta used the parameters of digitalisation to assess the capitalisation of companies (Demidenko, Kulibanova, Maruta, 2018), and Gromova employed it to assess Russia's automobile industry (Gromova, 2019).

The scientific community frequently provides research on the development of different kinds of

rating systems, in particular (Diaz-Sarachaga, Jato-Espino, Castro-Fresno, 2017) (for global assessment), and a number of works with a similar methodology (Balios, Thomadakis, Tsipouri, 2016) and (Holly, 2017) (for applied tasks). Despite a wide range of research on the global picture, few works consider the country-wise character of socioeconomic development. Thus, this article is especially relevant and significant for the world community and for a better understanding of Russia's position.

2. Materials and Methods

The National Projects of the Russian Federation look ahead to 2030 and represent 14 directions for developing the main societal sectors, with an overall allocation of over 25 trillion rubles and 7.5 trillion rubles of funds acquired from non-budgetary sources. The following categories comprise the National Projects framework:

1. Health Care

2. Education

3. Demography

4. Culture

5. Safe Quality Roads

6. Housing and the Urban Environment

7. Ecology

8. Science and Universities

9. Small- and Medium-Sized Business and the Support of Individual Entrepreneurs

10. Labour Productivity

11. International Cooperation and Exports

12. The Digital Economy of the Russian Federation

13. The Tourism and Hospitality Industry

14. A Comprehensive Plan for the Modernisation and Expansion of Trunk Infrastructure[1].

Due to this policy, socioeconomic inequality in Russia can be significantly reduced by boosting the competitiveness of citizens and the country itself in the global arena.

This expert method allowed for a selection of the most promising indicators of socioeconomic development in Western countries for the final assessment. The range of indicators includes the following:

1. Reduction in mortality among the working-age population (to 350 cases per 100,000 people)

2. Reduction in mortality from cardiovascular diseases (to 450 cases per 100,000 people)

3. Reduction in mortality from neoplasms, including malignant tumours (to 185 cases per 100,000 people)

4. Reduction in infant mortality (to 4.5 cases per 1,000 newborns)

5. Representation of Russian universities in the TOP-500 global university rankings

6. Number of students involved in public associations on the basis of educational institutions of general, secondary, higher, and vocational education (one million people cumulative total)

7. Increase in the total birth rate (to 1.7 children per woman)

[1]National projects: key goals and expected results. Official website of the Government of Russia. URL: http://government.ru/projects/selection/741/35675/.

8. Number of people recommended with individual health plans (health passports) in health centres (in millions of people)

9. Share (percentage) of citizens systematically engaged in physical activity and sports

10. Share (percentage) of small- and medium-sized businesses in the GDP

11. Share (percentage) of exports of small- and medium-sized businesses, including individual entrepreneurs, in the total volume of non-resource exports

12. Domestic spending on the development of the digital economy from all sources by share (percentage) in the GDP

13. Share (percentage) of households with broadband access

14. Share (percentage) of socially important infrastructure facilities equipped with broadband access

15. Share (percentage) of the Russian Federation in the global volume of data storage and processing services

16. Number of data processing centres in federal districts

17. Average hours of downtime of state information systems caused by computer attacks

18. Value share (percentage) of domestic software purchased or leased by federal executive authorities, executive authorities of constituent entities, and other public authorities

19. Value share (percentage) of domestic software purchased or leased by state corporations and companies with state participation

20. Labour productivity growth in medium-sized and large enterprises in the basic non-resource sectors of the economy (percentage compared to the previous year)

21. Export volume of non-primary non-energy goods (in billions of USD)

22. Effectiveness of support measures for industrial exports (minimum increase in exports per one ruble of state support)

23. Export volume of agro-industrial products (in billions of USD)

24. Effectiveness of support measures for exports of agro-industrial products (minimum increase in the volume of exports per ruble of state support)

25. Export volume of services (in billions of USD per year)

26. Share of manufacturing, agricultural products, and services exports in the country's GDP (percentage)

27. Volume of trade turnover between Russia and EAEU member states (in billions of USD)

The principles and requirements of the Fourth Industrial Revolution, with its focus on digital transformation, explain the significance of meeting all the previously mentioned indicators for Russia to ensure socioeconomic development. Meanwhile, one should not forget that the prospects for implementing an effective management model are burdened by many negative factors in the Russian context, creating a unique impediment for the Russian model of ensuring the effective implementation of even the most promising, widely proven global practices of socioeconomic development.

The analysis of the prospects for such an instrument as national projects (earlier, state programmes) will be based on the ratio of investments in this instrument of socioeconomic policy, expressed as a portion of the consolidated budget of the Russian Federation, to the growth of the HDI, with an average

growth rate of 0.52% per year (based on indicators from 1991 to 2021), which ranks 168 in the global ranking and slightly lower than the world rate of 0.72%[2].

This index is calculated by experts in the United Nations Development Program, along with a group of independent international experts who invite analytical methods and statistical data from national institutions and international organisations. It is applied in editions of a special series of UNDP reports on human development[3].

When calculating the HDI, three types of indicators are considered:

1. Life expectancy

2. Literacy rate (the average number of years spent on education) and the expected duration of education

3. Standard of living, estimated via gross national income per capita at purchasing power parity in US dollars[4].

The hypothesis of this research was that a more significant investment in national programmes and their prioritisation in the framework of public administration could improve the model of socioeconomic development. The HDI was selected because it is one of the most informative, time-based assessments of all available aggregate indicators of socioeconomic development. Since the time series of the consolidated budget of the Russian Federation began in 2003[5], the Federal Treasury has been conducting an accurate calculation of this indicator. The centralised implementation of financing these programmes began in 2011; thus, the sample contains indicators from 2003 to 2018, with the investments before 2011 assessed as zero. The raw data collection for this research is presented in Table 1.

Table 1. Summary indicators of expenditures on national programmes and their comparison with the growth of HDI

Year	Expenditures of the consolidated budget of the Russian Federation (mln. rubles)	Federal budget expenditures on the implementation of national programmes (mln. rubles)	Share in expenditures on state programmes	HDI in Russia	Percentage increase in HDI
2003	3,964,872		0.00%	0.754	1.07%
2004	4,669,654		0.00%	0.761	0,93%
2005	8,406,812		0.00%	0.764	0.39%
2006	8,375,228		0.00%	0.775	1.44%
2007	11,378,578		0.00%	0.786	1.42%
2008	14,157,027		0.00%	0.791	0.64%
2009	16,048,336		0.00%	0.789	-0.25%
2010	17,616,656		0.00%	0.796	0.89%
2011	13,747,779		0.00%	0.808	1.51%
2012	16,714,058		0.00%	0.811	0.37%
2013	18,338,453	1,144,843	6.24%	0.817	0.74%
2014	20,320,103	3,348,542	16.48%	0.818	0.12%
2015	22,205,323	3,538,295	15.93%	0.824	0.73%
2016	31,323,679	2,431,452	7.76%	0.828	0.49%

[2]Official website of the UN Human Development Index. URL: http://hdr.undp.org/en/data#.
[3]GDP per capita, PPP (constant dollars based on 2011. Official website of the World Bank. URL: https://data.worldbank.org/indicator/NY.GDP.PCAP.PP.KD? most_recent_value_desc=false.
[4]Official website of the UN Human Development Index. URL: http://hdr.undp.org/en/data#.
[5]Consolidated budget of the Russian Federation and the budgets of state off-budget funds. Federal Treasury, official website. URL: http://www.roskazna.ru/ispolnenie-byudzhetov/konsolidirovannyj-byudzhet/.

2017	34,284,709	4,828,688	14.08%	0.833	0.60%
2018	34,284,709	9,068,390	26.45%	0.841	0.96%
2019	37,382,242	12,597,491	33.70%	0.845	0.48%
2020	42,503,030	14,135,065	33.26%	0.83	-1.78%
2021	47,072,682	6,747,263	14.33%	0.822	-0.96%
2022	34,284,700	18,691,351	54.52%	0.754	

Source: compiled by the author based on data from the UN Human Development Index, Federal Treasury, Portal of state programs of the Russian Federation.

4. Results

Graphs (Figures 1 and 2) based on the data from Table 1 reflect the hypothesised assumption that such a mechanism of socioeconomic development improves the population's welfare, thus raising the HDI compiled by the UN.

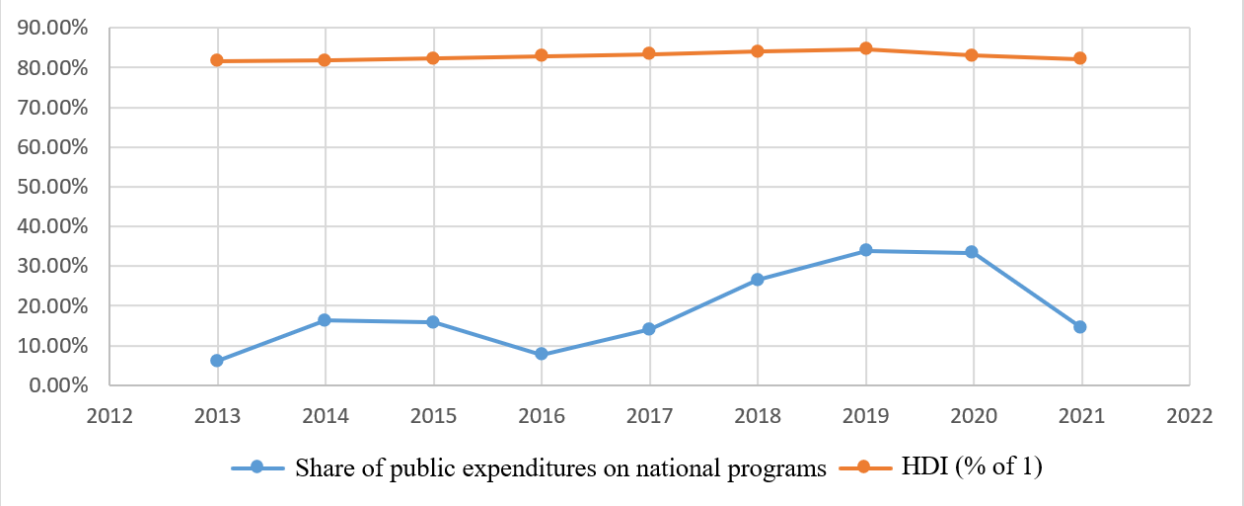

Figure 1. Graph of the share of public expenditures by year against the level of the HDI

Source: compiled by the author based on data from the UN Human Development Index, Federal Treasury, Portal of state programs of the Russian Federation

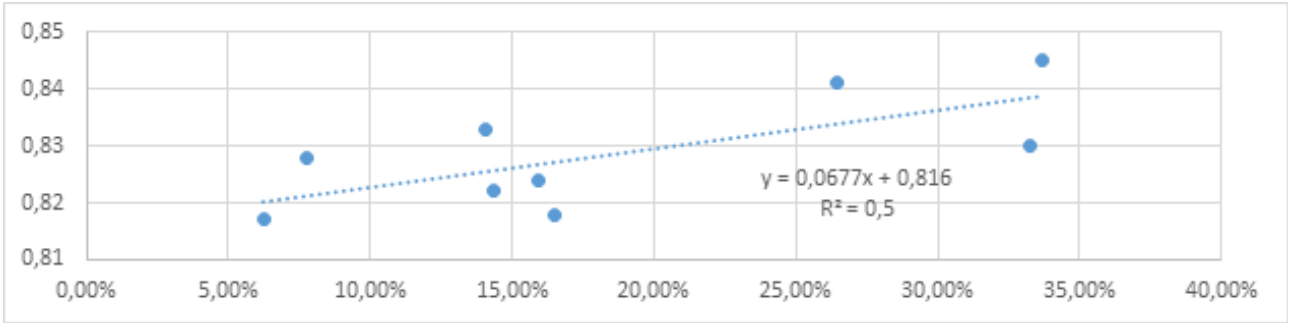

Figure 2. HDI indicator of the share of total expenditures on national programmes since 2013

Source: compiled by the author based on data from the UN Human Development Index, Federal Treasury, Portal of state programs of the Russian Federation.

Figures 1 and 2 show that the greater the share of expenditures invested in national programmes, the greater the rate of HDI growth in Russia. However, the coefficient of determination was small—only 0.5. Therefore, it can be concluded that despite having a certain correlation between the presented values, financing solely through project management cannot fully describe the growth or decline trends in

the HDI. However, it should be noted that at least half of this trend is described. Thus, the hypothesis suggested for this research was confirmed only partially, but conceptually, the mechanism of national programmes in the modern management system is complex and confusing. It nevertheless has a favourable impact on Russia's socioeconomic development. Moreover, the share of its implementation in the structure of expenditures has recently been declining, along with the overall HDI. In essence, it is reformed at the global level into national projects because it can show positive results in the socioeconomic development of Russia, but due to a number of problems and incorrect assessments, it does not sufficiently justify itself.

5. Discussion

Throughout this research on the project management of socioeconomic development in Russia, the authors identified the following areas for improvement:

1. Managers and supervisors are not personally responsible for national programmes, which leads to a lack of order on their implementation.

2. International experience in the area of the implementation of national projects is not considered, resulting in an insufficient level of efficiency.

3. No control body has been properly established to run national programmes, resulting in haphazard solutions to developing and implementing these programmes.

4. Expanding on point 3, the implementation of national programmes and projects lacks clear economic and social efficiency.

5. When national programmes are implemented, unachieved target indicators are often ignored, leading to a lack of flexibility.

6. Insufficient opportunities to revise indicators and a lack of clear criteria and terms result in unsystematic adjustments.

To improve the efficiency of national programmes in the Russian Federation, and to eliminate the identified shortcomings, ensuring the following steps are taken is necessary:

1. The introduction of personal responsibility for the implementation of programmes for department heads, the establishment of a payment and bonus system, and the introduction of a public control commission to track the effectiveness of national programme implementation

2. The development of a globally competitive innovation system and the acceleration of innovation processes in the national economy and society

3. The transition to a model of strategic target programme planning is based on the formation of an institutional system of national target programmes. This system will ensure transparent mechanisms for the revision of target indicators in response to external economic changes.

4. Strengthening requirements for the precise fulfilment of national programmes by their executors

5. The evaluation of the economic and social efficiency of national programmes using world-ranking systems

6. The transition to a fully project-based method of managing national programmes since it is currently not used full-scale

The actual percentage of fulfilment of the required indicators confirms the complexity of the mechanisms for the implementation of national programmes and projects. A total of 968 milestones were planned for 2019, the pre-pandemic year, when their fulfilment was not potentially hindered by serious external circumstances, and only 619 were conducted, making the overall fulfilment percentage of 63.94%. The biggest problem involves the following socioeconomic indicators:

1. Healthcare – 0 out of 92 milestones

2. Education – 0 out of 70 milestones

3. Social support of citizens – 25 out of 48 milestones

4. Employment promotion – 33 out of 58 milestones

5. Economic development and innovative economy – 76 out of 86 milestones, which occurred mostly because of objective economic prerequisites

6. Socioeconomic development of the Far Eastern Federal District/Kaliningrad Oblast/Arctic Zone of the Russian Federation (effectiveness of territorial management is assessed) – 38 out of 60 milestones.

7. Conceptual conditions for modern, effective socioeconomic development expressed in the programme Information Society are fulfilled by 30 out of 38 milestones[6].

Figure 3 presents the conducted regression analysis and shows a downward trend in the percentage of milestones completed when managing national programmes. This observation again confirms the presence of significant imperfections in the existing mechanism. Logically enough, it calls for changes in the current concept of national project management in general and national programmes in particular. Figure 3 shows the percentage of milestones completed by year.

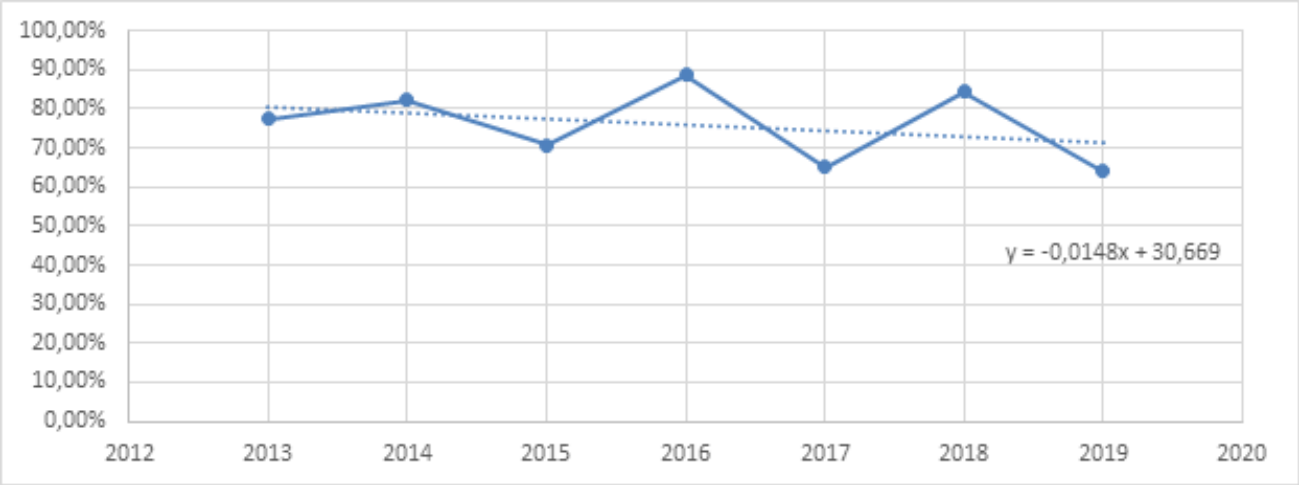

Figure 3. Percentage of milestones completed for national programmes5

Interestingly, due to the low execution efficiency, the section of the official website5, on which data on the execution of and expenditures on programmes are posted based on resolutions of the Government of the Russian Federation, is currently available only by direct link without redirection from the site's main page.

The assessment used can be refined and detailed when considering specific areas of the national programmes of the Russian Federation and other independent indicators of socioeconomic development that affect the HDI. This analysis is characterised by a certain consolidation and generalisation of both the quality of project management and its dependence on the HDI. Therefore, it provides broad prospects for more detailed consideration and deeper results. As previously indicated, the expenditures of federal funds of the Russian Federation on national project management in the consolidated budget were an average of 22.35%. Moreover, using this tool results in numerous economic and managerial difficulties, leading to lower HDI levels.

6. Conclusion

Following the authors' proposed recommendations, one should expect to improve the efficiency of spending federal funds (currently estimated at 8.5 trillion rubles), along with regional and local funds

[6]Financing of state programs. The portal of state programs of the Russian Federation is the official website. URL: https://programs.gov.ru/Portal/analytics/federal_budget_expenditure.

allocated for the implementation of national projects. From a social perspective, one should expect a more comprehensive fulfilment of social development obligations, which have been almost completely ignored since late 2019. Positive change is also likely to be seen in Russia's overall socioeconomic development, accompanied by the opportunity to minimise Russia's losses from the global economic crisis and regain the growth of the HDI caused by the pandemic.

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The article was submitted 02.02.2024, approved after reviewing 21.02.2024, accepted for publication 25.02.2024.

Статья поступила в редакцию 02.02.2024, одобрена после рецензирования 21.02.2024, принята к публикации 25.02.2024.

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