

DOI: <https://doi.org/10.53486/cike2023.21>

UDC: 364.48:330.35(478)

## SOCIAL INFRASTRUCTURE - FACTOR OF SUSTAINABLE DEVELOPMENT AND INCLUSIVE GROWTH IN THE REPUBLIC OF MOLDOVA

ALIONA BALAN

PhD, Associate Professor,  
Academy of Economic Studies of Moldova,  
Chisinau, Republic of Moldova  
Email: [balan.a@ase.md](mailto:balan.a@ase.md)  
ORCID ID:0000-0003-0094-7272

TATIANA GUTIU

PhD, Associate Professor,  
Academy of Economic Studies of Moldova,  
Chisinau, Republic of Moldova  
Email: [gutium.tatiana@ase.md](mailto:gutium.tatiana@ase.md)  
ORCID ID: 0000-0002-8884-3269

**Abstract:** Social infrastructure is the foundation of a sustainable and equitable society, providing the essential services needed to support the well-being and sustainable development of the population. From education and healthcare to transport and community spaces, a developed social infrastructure is essential to promoting wellbeing, inclusion and economic growth. However, as societies evolve and face new challenges, continuous improvement and increased investment in these critical systems becomes imperative. This article analyzes various measures that can be taken to improve the social infrastructure in the Republic of Moldova, ensuring a better quality of life for its citizens. In addition, the article emphasizes the need for collaborative efforts between governments, businesses, and civil society to design, finance, and maintain effective social infrastructure systems.

**Keywords:** social infrastructure, sustainable development, inclusive growth, Republic of Moldova

JEL Classification: O10, R10

### Introduction

In efforts to promote sustainable development and inclusive growth, we cannot underestimate the importance of social infrastructure. While physical infrastructure such as roads, bridges and power grids play a defining role, it is social infrastructure that forms the backbone of a harmonious and equitable society.

Social infrastructure comprises the institutions, facilities and services that support social welfare and facilitate societal progress. It includes educational systems, health facilities, community centers, parks, cultural institutions, social services and more. These components provide the foundation for social interaction, community development and access to essential services, thereby improving quality of life and promoting inclusive growth [1].

However, as societies evolve and face new challenges, continuous improvement and increased investment in these critical systems becomes imperative. Investment in social infrastructure is recognized as a key factor in achieving sustainable development, reducing poverty and inequality and improving the quality of life for all members of society.

### **Material and method**

In the framework of the research, general scientific methods of researching socio-economic processes and phenomena were used, in particular methods such as analysis, synthesis, deduction, induction, the method of scientific abstraction were used.

The information support of the research is represented by both national scientific publications and international studies, the annual reports presented by the Ministry of Finance of the Republic of Moldova, the National Bureau of Statistics (NBS), the data provided by the Ministry of Education and Research, the data published by Eurostat, the Organization for Economic Cooperation and Development (OECD), the World Bank and other informational resources.

### **Results and discussions**

Social infrastructure represents the set of services and resources that support the well-being and development of a society. Education is an essential element of human and social development, it plays a significant role in the social infrastructure.

A well-trained and educated workforce is absolutely necessary to promote innovation, stimulate economic growth and ensure the long-term development of a society. Education and training provide individuals with the skills and knowledge to contribute to the economy, innovate and solve problems, which in turn leads to national prosperity and economic advancement. It is a key element for a country's global competitiveness and improving the quality of life of its citizens.

According to the United Nations Educational, Scientific and Cultural Organization (UNESCO), universal access to quality education is a central pillar of sustainable development. Countries that invest in education see significant increases in literacy rates. In most EU member states, the adult literacy rate is over 99% (2021) [10] with well-developed educational systems and access to quality education.

Among the countries with a high level of literacy is the Republic of Moldova, which has a literacy rate of over 99% (2022). It is also worth mentioning the constant evolution of the gross enrollment rate at all educational levels over the last decade. In 2022, the gross enrollment rates were as follows: for primary education - 107.1% (compared to 104.4% in 2015); for secondary education - 103.9% (compared to 106.4% in 2015); for second level secondary education - 83.0% (compared to 67.8% in 2015); and for tertiary education - 64.5% (up from 51% in 2015) [8].

However, there are educational gaps between urban and rural areas. In recent years, rural schools with a small number of students have been closed, a consequence of the demographic decline faced by the Republic of Moldova. Pupils in villages may have difficulty getting to school in other localities, particularly due to the lack of adequate transport infrastructure.

In addition, school infrastructure in schools in rural areas often lacks modern infrastructure and resources such as well-equipped laboratories, rich libraries, sports facilities and learning technology, which affects the quality of the educational process. At the same time, rural areas face a shortage of teachers (more than 2,000 teachers in 2022), as well as limited access to technology and the Internet, a fact that creates gaps between the quality of education offered and the school performance of students.

These educational gaps between urban and rural areas should be a concern for authorities and communities, as these inequalities influence the personal and professional development opportunities of students in rural areas. Under these conditions, efforts are needed to improve the educational infrastructure in the countryside, to increase access to education and to ensure a more uniform quality of education throughout the country.

The government is constantly directing resources towards improving the educational infrastructure. According to the data presented by the Ministry of Finance, in 2022, the Republic of Moldova allocated 16,1% of the total government expenditure for education [7]. In the same year, the Republic of Moldova allocated about 5.8% of the Gross Domestic Product (GDP) to the field of education. Although these percentages represent a significant weight within the GDP, in absolute terms, the amounts allocated are insufficient, amounting to 15.8 billion lei.

The percentage dedicated to education in GDP aligns with some European countries, but it remains insufficient to address all the challenges faced by the education sector in the Republic of Moldova.

Social health infrastructure has a direct impact on population health and economic productivity. Robust healthcare systems provide preventive care, treatment and disease management, improving the overall health of the population [3]. States that invest in quality and accessible medical services record a decrease in the infant mortality rate, an increase in life expectancy. According to Eurostat data, life expectancy at birth in the EU-27 reached an impressive 81.0 years in 2020, demonstrating substantial improvements in public health.

In the Republic of Moldova, life expectancy at birth has increased by about four years since 2000 (from 67.6 years to 71.4 years in 2022). However, there are major discrepancies in life expectancy by gender, 67.1 years for men and 75.7 years for women (2022) [6]. This reflects socio-economic inequalities, but also substantial deficiencies in the provision of health services. The social health insurance system offers a comprehensive package of services, however, approximately 16% of the population remains uninsured and is only entitled to a minimum package of services.

Another challenge for the country's health system is the growing shortage of health professionals. According to data from 2021, the number of doctors per capita in the Republic of Moldova was approximately 32.4 doctors per 10,000 inhabitants, and the number of medical assistants, approximately 66.3 medical assistants per 10,000 inhabitants [6]. These figures indicate a low density of medical staff compared to the EU average, where there are approximately 37.2 doctors per 10,000 inhabitants and approximately 87.8 nurses per 10,000 inhabitants (2021).

At the same time, hospitals in the Republic of Moldova face problems related to infrastructure and the provision of modern medical equipment. A large number of hospitals need modernization and investment to improve the quality of medical services offered, which highlights the need for modernization and investment in this area to ensure high standards of medical care.

In the Republic of Moldova, in the last decade, substantial investments were directed towards the modernization of medical units, expanding the coverage of medical assistance and improving the training of medical personnel. In 2022, public expenditure on health accounted for approximately 5.4% of GDP and 14.3% of National Public Budget (NPB) expenditure. However, these expenses are insufficient.

It is essential that the Republic of Moldova continues to invest in the health system, to ensure better access to medical services and to allocate a higher proportion of GDP to health (in the EU public spending on health is on average approximately 9.3 % of GDP, 2021). The government must focus on combating the shortage of health professionals, stimulating and maintaining medical personnel in rural regions through specific programs and support, modernizing hospital infrastructure.

Social infrastructure is not limited to health and education, but also extends to housing and social protection.

Access to adequate and affordable housing is essential for citizens' quality of life and social inclusion. The Government of the Republic of Moldova has undertaken several initiatives to address housing challenges, particularly for low-income individuals and vulnerable families.

Thus, in order to ensure access to housing, the government of the Republic of Moldova initiated the "Prima Casa" program in 2019, being extended until July 2023. This program offers financial assistance in the form of mortgage loans at low interest rates for citizens who wish to purchase their first House. The purpose of this program is to make housing affordable and support low-income families in purchasing a property. Despite some criticisms related to the eligibility criteria and the limited level of loans granted, the "Prima Casa" program facilitated the access of a large number of citizens to housing. Over 8,000 families and young people have purchased homes through the Prima Casa program, offering them housing options at affordable prices.

In the last decade, the internal labor migration of the population has intensified in the country, so that, during 2022, according to the NBS data, about 21.5 thousand people changed their residence inside the country, the number of the population in urban localities increased by 5.3 thousand people at the expense of rural areas. The largest number of migrants was oriented towards the big cities, 53.4% of the total arrivals returned to the municipality of Chisinau, followed by the municipality of Balti with 3.7% [3].

In these circumstances, the development of urban infrastructure is necessary, which includes the expansion of water and sewage networks, the modernization of transport infrastructure and the development of green areas and parks. These investments in urban infrastructure will not only improve the living conditions of residents, but will also help make cities more attractive to new investors and real estate developers.

Although some progress has been made, challenges remain, requiring continued efforts and investment in social infrastructure. Strengthening social safety nets and promoting sustainable housing solutions remain essential in ensuring the well-being and prosperity of all the country's citizens.

Social protection is an essential pillar of the social infrastructure, ensuring adequate support for the vulnerable population. Data from the International Labor Organization (ILO) demonstrate that

effective social protection programs significantly reduce poverty and inequality. This includes unemployment benefits, welfare and health care coverage, providing a safety net for individuals and families, enabling them to face economic challenges and maintain their dignity and well-being.

The social protection system in the Republic of Moldova is structured in two distinct components: state social insurance, which involves the granting of pensions, and social assistance, which is provided to people in situations of risk or vulnerability. The largest part of the financial resources is allocated to social insurance, representing approximately 65% of the total expenditures for social protection. In contrast, social assistance represents only 35% of the total of these expenses. This distribution indicates that the funds allocated to other types of covered risks, such as those related to maternity or temporary incapacity for work, are extremely limited.

In the Republic of Moldova, spending on social protection has grown steadily in recent decades, according to the data of the Ministry of Finance of the Republic of Moldova, spending on social protection in 2022 constituted about 14% of GDP. Social protection has the largest share in BPN expenses, approximately 36.9%.

Despite the increase in allowances in social assistance programs, the poverty rate in the country has increased. The NBS data indicates that between 2010 and 2022, the percentage of the country's population living below the poverty line decreased from 26.3% to 31.1% [4], with the Republic of Moldova being one of the countries with the lowest incomes in Europe, with a proportion significant population living below the poverty line, which highlights the importance of social protection programs.

In order to ensure effective and sustainable social protection, it is important to strengthen the social protection system, promote transparency and responsibility in the use of resources, and implement policies that address the social challenges facing the Republic of Moldova. The government must implement social assistance programs to support low-income families and individuals, programs that provide financial aid, food stamps, and other essential resources to those in need.

In the modern age, digital social infrastructure is essential for providing access to information, services and opportunities, this includes digital connectivity and access to information and communication technologies (ICTs). Bridging the digital divide is essential to ensure equal opportunities and inclusive growth. A study by the International Telecommunication Union (ITU) showed that a 10% increase in broadband penetration can lead to a 1.38% increase in GDP, demonstrating the significant economic impact of digital social infrastructure.

The Republic of Moldova has invested in the development of its digital infrastructure to reduce the digital divide and promote digital inclusion. The Global Innovation Index in the Republic of Moldova has registered an increase in recent years. In 2022, the Republic of Moldova placed 56th out of 132 countries and economies in the ranking of the Global Innovation Index, thus climbing 8 positions compared to 2021 [9].

One of the major objectives of sustainable development is to reduce social inequality. Social infrastructure plays a vital role in achieving this goal. Statistical data prove that a well-developed social infrastructure contributes to the reduction of discrepancies between social and economic groups.

In the Republic of Moldova, social inequality remains a pressing challenge, affecting citizens' well-being and opportunities. Despite progress in some areas, disparities persist in terms of access to education, healthcare, income and social support.

In the Republic of Moldova there is a high discrepancy between the incomes of those with high incomes and those with low incomes. According to the National Bureau of Statistics, in the period between 2018 and 2022, the Gini coefficient registered an increasing trend. In 2022, this coefficient was estimated at 0.3208, increasing from the value recorded in 2018, which was 0.2931. The increase in the Gini coefficient by 0.0277 or about 9.5% during this period indicates an intensification of income inequality during those years.

Rising income disparities have been associated with widening poverty, widening regional disparities, and four times more absolute poverty in rural areas than in urban areas. Higher poverty rates were also recorded in the south of the country compared to the national average. In 2022, the absolute poverty rate in the south of the country reached an alarming level of 49%, which is approximately five times more than the rate recorded in Chisinau (10%) [5]. The concentration of wealth in urban areas has exacerbated income inequalities, leaving rural communities more vulnerable to poverty and with limited access to opportunities.

To increase social support and reduce social inequality, measures such as improving the efficiency and targeting of social assistance programs are needed. In addition, promoting job training and creating economic opportunities can empower individuals and families to lift themselves out of poverty. By providing essential services to all, regardless of their socio-economic status, social infrastructure can support social inclusion and the creation of a fair and prosperous society.

Sustainable development is a key objective of the Republic of Moldova, and social infrastructure can play an important role in achieving this goal. Adequate social infrastructure contributes to the development of rural communities, reducing migration to urban areas and creating a balance between urban and rural development [2]. It promotes social inclusion and provides equal opportunities for all members of society to improve their quality of life.

Ensuring sustainable financing for the development and maintenance of social infrastructure is an essential necessity. Continued partnerships between the government, the private sector and international organizations can play a key role in supporting investments in social infrastructure, in realizing the Republic of Moldova's vision for a prosperous and inclusive society.

## **Conclusion**

Social infrastructure is a fundamental component of sustainable development and societal progress. It plays a key role in ensuring access to health and education services for all, providing adequate housing and promoting social inclusion.

Investments in social infrastructure are more than just expenditures, they are long-term strategies that generate substantial returns in terms of economic growth, poverty reduction and overall well-being. Investments in social infrastructure contribute not only to the improvement of the quality of life, but also to economic growth, to the achievement of sustainable development goals.

Governments, businesses and communities must work together to ensure sustained and strategic investment in social infrastructure. By prioritizing social infrastructure, the Republic of Moldova can create a stronger and fairer future for its citizens, unlocking the potential for economic growth, innovation and social well-being.

Improving social infrastructure is a collective responsibility that requires collaboration between governments, private organizations and citizens. By prioritizing education, healthcare, housing, transportation and community spaces, society can create an environment where everyone has a chance to thrive. These investments not only increase the general well-being of citizens, but also contribute to economic growth, social cohesion and a more prosperous future for generations to come.

**Acknowledgment:** The article was developed within the project 20.80009.0807.29 Perfecting the mechanisms of application of innovative instruments aimed at the sustainable growth of the well-being of the population of the Republic of Moldova, within the State Program.

## REFERENCES

- [Alan Latham, Jack Layton.](#), 2019. Social infrastructure and the public life of cities: Studying urban sociality and public spaces. In: *Geography Compass*, [Volume 13, Issue 7](#). Available at: <https://compass.onlinelibrary.wiley.com/doi/10.1111/gec3.12444> [Accesat 20 August 2023]
- BALAN, A., 2023. Social infrastructure-an important factor of regional development. In: *Economics, Social and Engineering Sciences EcoSoEn*. ULIM, an.6, nr.2, pp. 5-11, ISSN 2587-344X. Disponibil: [https://ibn.idsi.md/sites/default/files/imag\\_file/5-11\\_39.pdf](https://ibn.idsi.md/sites/default/files/imag_file/5-11_39.pdf) [Accesat la 15 septembrie 2023]
- GUTIUM, T., BALAN, A., 2023. Provocările sistemului de sănătate din Republica Moldova. In: *Știință, educație, cultură: conferință științifico-practică internațională*. Comrat: Tipografia A&V Poligraf, vol. 1, pp. 103-108. ISBN 978-9975-83-255-7. Disponibil: <https://kdu.md/images/Files/mezhdunarodnaya-nauchno-prakticheskaya-konferenciya-nauka-obrazovanie-kultura-posvyashchennaya-32-godovshchine-kgu-tom1.pdf> [Accesat la 15 septembrie 2023]
- Biroul Național de Statistică al Republicii Moldova. Saracia și inegalitatea. Disponibil: [https://statbank.statistica.md/PxWeb/pxweb/ro/30%20Statistica%20sociala/30%20Statistica%20sociala\\_04%20NIV\\_NIV070/?rxid=b2ff27d7-0b96-43c9-934b-42e1a2a9a774](https://statbank.statistica.md/PxWeb/pxweb/ro/30%20Statistica%20sociala/30%20Statistica%20sociala_04%20NIV_NIV070/?rxid=b2ff27d7-0b96-43c9-934b-42e1a2a9a774) [Accesat la 10 septembrie 2023]
- Biroul Național de Statistică al Republicii Moldova. Nivelul de trai al populației. Disponibil: [https://statistica.gov.md/ro/statistic\\_indicator\\_details/3](https://statistica.gov.md/ro/statistic_indicator_details/3) [Accesat la 10 septembrie 2023]
- Biroul Național de Statistică al Republicii Moldova. ACCESUL POPULAȚIEI LA SERVICIILE DE SĂNĂTATE. 2022. Disponibil: [https://statistica.gov.md/files/files/publicatii\\_electronice/acces\\_servicii\\_sanatate/Acces\\_servicii\\_sanatate\\_2022.pdf](https://statistica.gov.md/files/files/publicatii_electronice/acces_servicii_sanatate/Acces_servicii_sanatate_2022.pdf) [Accesat la 20 august 2023]
- Ministerul Finanțelor. Raport privind executarea bugetului public național în anul 2022. Disponibil: <https://mf.gov.md/ro/trezorerie/rapoarte-privind-executarea-bugetului/rapoarte-anuale> > [Accesat la 15 septembrie 2023]
- Ministerul educației și cercetării al Republicii Moldova. (2022). Raport de activitate pentru anul 2022. Disponibil: [https://mecc.gov.md/sites/default/files/raport\\_mec\\_2022\\_1.pdf](https://mecc.gov.md/sites/default/files/raport_mec_2022_1.pdf) [Accesat la 15 septembrie 2023]
- Global Innovation Index 2022 Disponibil: <https://www.globalinnovationindex.org/gii-2022-report#> > [Accesat la 15 septembrie 2023]
- UNESCO. Disponibil: <https://en.unesco.org/> [Accesat la 20 septembrie 2023]
- World Health Organization (WHO). Moldova Country Profile. Disponibil: <https://www.who.int/republic-of-moldova> [Accesat la 20 septembrie 2023]