The paper examines the current state of economic relations in the sphere of social infrastructure, assesses and analyses the general patterns of development of its branches in the integral system of the national economic company of Ukraine, considers the main forms of management of infrastructure branches, outlines the prospects for its functioning in the post-industrial society. The importance of the study of economic and scientific social-economic needs of society in the context of international experience is substantiated. The experience of developed countries of the world on the trends of decentralization at the management levels is analysed and the possibility of implementation in Ukraine is considered. The mechanism of management of social infrastructure sectors is studied, with special emphasis on education, science, health and culture. The mechanism for improving the management of social infrastructure sectors at the present stage of development of the national economic complex is based on certain methodological principles.

Keywords: social infrastructure, services, non-productive sector, healthcare, education, knowledge-intensive technologies, post-industrial society, market economy.

1. INTRODUCTION

Social infrastructure, like all other branches and divisions of the national economic complex, requires a constant improvement. This is due not only to their complexity and importance, but also to the great changes in society that are taking place under the influence of scientific, technological and social progress, modern globalization and internationalization in the world economy. No less important factor that determines the search for effective forms of management and improvement in this area of activity is the transition of the Ukrainian economy to market principles of management. We live in a time when the national economic science has a task of great importance – to develop a fundamentally new concept of the functioning of the social system in a market economy.

In the scientific literature many authors consider the issues of social infrastructure management. However, each of them examines, as a rule, one facet of the problems of its formation, functioning or development. There are practically no deep, economic-
-theoretical, methodological studies of social infrastructure as a qualitatively defined complex of spheres of human society. The research results are reflected in the works of such domestic scientists as N.M. Danylyshyn, O.I. Datsii, M.Kh. Koretskyi, V.I. Kutsenko, V.R. Kucherenko, S.M. Makuha, V.M. Novikov, I.V. Prokopa, P.T. Sabluk, N. A. Khvesyk and others. They analysed the problems of including various elements of infrastructure in the system of market relations, the peculiarities of functioning of social infrastructure in the transition period to the market, patterns, trends and prospects for the development of the market as a whole and its individual parts.

2. TASKS

The degree of development of the problem gives a reason to believe that the scientific literature is dominated by the formulation and solution of issues related to individual aspects of social infrastructure and does not sufficiently reflect its methodological, general theoretical problems, without solving which it is difficult to understand the essence of social infrastructure, its specifics and correctly regulate its functions in order to increase the efficiency of social production and improve the quality of people's lives. This is what led to the choice of the research topic.

The main task of the work is to study economic relations in the sphere of social infrastructure, analyse general patterns of development of its branches in the integral system of the national economic complex of Ukraine, improve the basic forms of management of infrastructure branches, and forecast the prospects for its functioning in a post-industrial society.

3. RESULTS

Today, Ukraine lags behind developed countries in many areas of scientific and technological progress, the success of which is directly related to the main sectors of social infrastructure (in the field of education, science, health, information systems, the total volume of effective science-intensive production). Thus, improving the management mechanism of social infrastructure sectors has become a necessary and unavoidable phenomenon, which largely determines the successful functioning of the economic mechanism and its social and economic efficiency. When justifying the process of improving the mechanism of functioning of social infrastructure, we consider it necessary to proceed from the following methodological principles.

First, the social infrastructure sector, as we have already noted, is an essential part of the country's social national production, and therefore the mechanism for regulating such a general system must take into account the interaction and interdependence of its economic entities. We would like to emphasize here that this interdependence of the sectors of the reproduction complex is the basis for effective social and economic development of the country as a whole. Violation of this principle of management, which happened in Ukraine during the period of market transformations (using the left principle of financing social infrastructure sectors), will not only lead to a decrease in the capacity of these industries, but also to a decrease in the level of social welfare of society. The round of scientific, technical and social progress has also been noticeably disrupted. As a result, Ukraine has lost many priority achievements in the system of scientific and technical progress and is particularly lagging behind in the level of development of high-tech production. Thus, the entire structure of branches of the national economic complex of the country should be
under constant attention of economic science and development, depending on the social and economic needs of society and the conditions of the international situation.

Secondly, the social infrastructure sectors (education, health, culture, art), as the experience of their use shows, are by their socio-economic nature non-profit divisions. They are designed to provide services to the population on a fundamentally different, free of charge basis. As the long-term experience of developed foreign countries and our country shows, the non-commercial method of providing such services provided and now provides society with the greatest socio-economic efficiency. Therefore, the process of further improvement of this sphere should take into account this important regularity. However, the named pattern of development of social infrastructure sectors – its non-market character is implemented in the conditions of market relations of management, and we must inevitably take into account such a special atypical situation. The contradiction between the non-market nature of the social sphere and modern market conditions requires the expansion of the regulatory role of the state. In these conditions, social infrastructure sectors are drawn into the mechanism of market relations and are affected by them in the implementation of their social functions. This contradictory situation is always the most difficult when regulating this process. Therefore, we consider it necessary to emphasize that when regulating social infrastructure sectors, the state should give priority to non-commercial forms of functioning of these divisions. A non-commercial, free way of consuming public goods (services), of course, does not mean that there are no labour costs and means of production in their implementation. We are talking about the fact that this form of services is provided by infrastructure industries at the expense of the state budget, if there is a state form of ownership in these divisions. Only such a management mechanism creates conditions for the successful implementation of public non-commercial status in the implementation of infrastructure units of their functions. As we can see, ownership forms are also important for the mechanism of regulating infrastructure divisions.

Thirdly, social infrastructure sectors operate in market relations and are included in the system of these relations. However, when performing their functions, they are not focused on maximizing profits. Their main goal and task is to improve the quality of services and their social and economic efficiency. As for the efficiency of labour in the sphere of providing services, its economic efficiency is shown indirectly, through the production sphere. For example, in the field of education, teachers train scientists and qualified specialists for material production sectors through labour and services in order to improve its quality and efficiency. Other branches of the social infrastructure perform similar functions. This is a feature of the labour functions of the service sector. Public free goods that are used by the population of the country have a positive impact on the social situation; allow us to successfully solve the problems of general education, professional development of employees, and so on. Thus, the general trend in regulating and improving social infrastructure sectors is to make the consumption of essential services such as education, treatment, culture, art, and others free of charge. Why, then, in almost all states, in addition to free public services, there are also paid services, although the paid system of regulation contradicts the economic nature of the use of services? This is due to the need to preserve the competitiveness and competitiveness of business entities, as well as the need to create conditions for the training of so-called unique, reference specialists for the operation of high-tech production, the most prestigious and at the same time the most expensive divisions. This is one of the features of the functioning of the market system of management, when contradictions between social and economic processes do not lend themselves to
objective principles of regulation. Apparently, their solution will be possible only in the conditions of a new system – a post-industrial civilization.

Nevertheless, these are not the only contentious and unresolved issues in the system of social infrastructure, the mechanism of market regulation of which remains unsettled. In Ukraine, during the period of economic reform, state funding for educational, medical and other infrastructure units has significantly decreased. For their survival, the state allowed the use of a so-called mixed form of activity. For example, some students study free of charge at the expense of the state, while others pay their tuition at the same educational institution. In addition to attracting more commercial students, and therefore profits, certain educational benefits are created for this category. Such a system does contribute to the survival of higher education institutions in a difficult period of market transformation, but this is due to increased social injustice. “Overboard” of such educational institutions is a talented, but financially unsecured youth. Such a mechanism for regulating and promoting social infrastructure is economically and socially useful, and it is likely to be temporary.

Fourthly, the areas of social infrastructure – education, treatment, science, culture and art – are those divisions that ensure the successful growth of scientific, technical and social progress, contribute to the growth of labour productivity and increase the efficiency of public national production. This is possible only if well-trained human resources are available. The formation of a new person with the best quality characteristics, capable of fulfilling the tasks of a post-industrial civilization society – is one of the crucial requirements of our time. When we talk about training new specialists, about the mechanism for improving this area, we should no longer be limited to the methods of the old system. The new system of training people in post-industrial production must also be improved. Even today, it is becoming clear how dramatically people’s lives are changing under the influence of scientific, technical and social progress, which new, often unexpected discoveries appear both in the life of the world community and in the system of national production. This means that there are new problems that need to be solved immediately. In such conditions, the mechanism for regulating and improving social infrastructure sectors should not only take into account these new phenomena, but also, if necessary, integrate with them and create joint integrated entities. In other words, the mechanism for managing and improving social infrastructure sectors must be efficient and capable of integration with other phenomena.

Fifth, when forming the methodological basis for improving the mechanism of management of social infrastructure, it is necessary to take into account the dynamism of the development of these units. This is evidenced by the processes that took place in the conditions of the scientific and technical revolution. However, there are also other patterns. In modern society, there is a process of relative slowdown in the growth of a number of material goods, due to the existence of scientifically based norms of their consumption. When considering the mechanism for managing such processes, it is likely that there will be an increasing trend of slow consumption and many other benefits as a result of the use of medically sound norms. This trend has been justified by scientists around the world for a considerable time, but is slowly being implemented. The success of its implementation is directly related to the level of culture and education of a person and, of course, to the need to change a number of conceptual provisions of the market system of management. This example once again confirms that without changing and improving the foundations of the market system itself, it is impossible to solve the most urgent important problems of human life. It is known that the regularity of rational use of limited resources is very important, not
only because of the constant growth of the world's population, but also because of the limited resources themselves. The possibility of solving this problem, first, lies on the path of further development of scientific, technical and social progress, where the most important is the progress of the person himself, his inexhaustible genetic capabilities. This fundamental boundary should be used in forming the basic concepts of regulating the mechanism for improving social infrastructure sectors.

Sixth, in the field of social infrastructure, those involved in the system of market relations are forced to take into account its basic principles of management. The non-market nature of these industries is taken into account by the state when performing their functional tasks. There are also other phenomena, such as competition and monopoly that affect these divisions. We know how important competition is in the development of scientific and technological progress. It would be difficult to imagine that competition and competition should leave aside those industries through which the development of scientific, technical and social progress is carried out. In fact, competition is manifested not only in competitive processes in these industries within the country, but also on a wide scale, it is conducted between different countries of the world. Therefore, the mechanism for managing social infrastructure sectors must be included in the system of international competition. We must take into account that in the world community, only those economic entities and countries that have mastered advanced science and technology and have a larger volume of knowledge-intensive production than others win.

Therefore, the mechanism for managing social infrastructure sectors should regulate and improve the Ukrainian system of training specialists and their selection among young people. Unfortunately, the mechanism of such selection in our higher educational institutions is very imperfect. In practice, there are many monopoly obstacles that prevent the most talented young people from entering educational institutions that train specialists in priority areas. This is, for example, the fate of a large part of rural youth, since the level of school preparation here is traditionally lower than in cities. In addition, rural boys and girls are less financially secure than most urban boys and girls, and they are also in a worse position in comparison with them, since they cannot apply for places in prestigious educational institutions with a paid form of education or in private institutions. Thus, the monopoly of the “money bag” in the educational sphere has become a brake on the way to higher education.

The same monopoly exists in the scientific sphere. In higher education institutions, in addition to state-funded ones, commercial postgraduate courses are now widely used, where the cost of training is quite high. Research institutes have extremely low pay for beginning researchers. The monopoly of the “money bag” has deeply engulfed the entire system of education and science. In other words, the expansion of market-based methods of managing the educational and scientific spheres has strengthened the monopoly of the “money bag” and thus created artificial obstacles to accelerate the solution of such an important national problem.

The problem of ugly monopolies and competition is also now widespread in health care, culture, and the arts. Instead of the necessary competition and permitted useful monopolies, which have a beneficial effect on the work of these industries, the present mechanism of their functioning is increasingly becoming a commercial system, alien to the nature and spirit of public non-commercial services.

The mechanism for managing social infrastructure sectors, especially such as education, science, health, and culture, is a regulatory mechanism that should take into account the
public non-commercial nature of their functioning. It should not be based on profitability as the main criterion for efficiency. Evaluating the effectiveness of these industries goes beyond market relations. There are no longer market, private values, but public, universal values. Such a mechanism by its nature will increasingly approach the system of post-industrial production with values that are close to the needs of a new, more efficient business entity, with a primary focus on meeting the needs of a person of social orientation. The mechanism for such management of social infrastructure sectors and their improvement should be interconnected with the material production sectors. This interaction is particularly important for Ukraine.

On the one hand, we keep the sectors of social infrastructure that determine the development of scientific, technical and social progress “on a starvation ration”, and the growth of high-tech production – the main priority in the progress of society is being held back. On the other hand, Ukraine has large natural reserves of iron ore, coal, untold natural resources, as well as environmentally friendly areas for living, recreation and tourism. Billions of dollars of revenue from their implementation are mostly spent irrationally, instead of using them for the needs of progress and the creation of a huge potential of advanced technologies that provide solutions to the problems of the scientific and technological revolution. The unsettled nature of many urgent tasks in the field of scientific, technical and social progress is precisely related to the imperfection of the mechanism of national economy management, where the link between the branches of material production and the non-productive sphere of activity is artificially severed.

In the developed countries of the world, there is a general trend of decentralization in the levels of government. A significant share of management functions is increasingly moving to the lower levels of management, to regional and local institutions. Such changes in the management system allow lower-level managers more freedom in making the necessary management decisions. This helps to get rid of many outdated principles and habits and timely perceive the changes that bring scientific, technical and social progress and changes in the system of international relations. It is becoming increasingly clear that the dynamism of society, the scientific and technological revolution, internationalization and modern globalization are the most important characteristics of the modern stage of economic development, when education and science, as well as other sectors of social infrastructure (health, culture, art and information system) have become the most popular and require constant improvement. It is no coincidence that almost all countries constantly raise problems of reforming these sectors of social infrastructure.

The implementation of reforms aimed at decentralization does not mean that the state has given up responsibility for the development of social infrastructure. The state remains the guarantor of its development with the strengthening of control functions. It assumes the responsibility for developing the fundamental problems of the development of this sphere in the new conditions of civilization and its effective use. Therefore, we are not talking about pure decentralization, but rather about improving the functional tasks of the new stage of development. It is very risky to go down the path of reducing the state's interest in social infrastructure: Ukraine already has such a negative lesson.

When we consider the problem of improving the management mechanism of social infrastructure sectors, we inevitably return to the problem of ownership. As we have already stressed, the activities of infrastructure units are in the form of public goods (services) and are non-commercial in nature. Mainly state-owned divisions can provide non-commercial public goods. This mechanism of functioning at the expense of the state budget is peculiar
to social infrastructure units whose activities take the form of public services of a non-commercial nature. This is evidenced by the practice of managing these divisions in all countries of the world. Most of the foreign enterprises in these industries have a communal (state) form of ownership. In addition, today we could say that the economic and social nature of social infrastructure sectors is adequately met by public state ownership. This adequacy is extremely necessary, it gives the greatest social and economic efficiency. Yet, as the practice of functioning of infrastructure industries shows, an active search for the most effective forms of management and management methods continues in all countries of the world. This is mainly due to three main reasons.

First, the creation of a system of a new economic mechanism that meets the requirements of post-industrial civilization inevitably covers the areas of social infrastructure that play a specific progressive role in this global trend.

Secondly, the maintenance of communal property is not permanent; it is very dynamic and reflects the ongoing changes in social national production.

Thirdly, the mechanism of functioning of municipal property in Ukraine is not worked out and (despite the formal independence of local authorities) is largely associated with the central state structures, as well as with the level of economic development of their region.

To this, we can add that municipal property itself is a fairly complex system. The fact is that municipal property is a specific form of state property that operates in cities and villages to provide various social and industrial services to the population. By its social and economic nature, communal property is a more flexible and dynamic form for opportunities to cover the needs of the population, taking into account the traditional, national, ideological, and natural-climatic characteristics of each region. Moreover, its main advantage is that the main branches of social infrastructure are non-profit by their social and economic nature as has already been emphasized, they most effectively provide services in the form of public free goods. Such public free services are more successfully implemented under state ownership. It would seem that it is precisely with such objective social and economic prerequisites that an effective management system for infrastructure divisions can be created. However, the management system for social infrastructure sectors is currently very imperfect.

Many institutions of culture, education, health, science and other industries are now on the verge of survival, they have an outdated technical base and extremely low wages. There is a growing gap in the volume of knowledge-intensive production compared to developed countries, and the process of migration of specialists and scientists to other countries is increasing. These shortcomings and contradictions are the result of very unskilled management of this sphere. Where is the way out of such a difficult situation, what is the methodological basis for eliminating mistakes and improving the situation?

4. CONCLUSIONS

The difficult situation in the social infrastructure is largely due to an erroneous concept, for which the labour activity of employees in its branches is artificially removed from the market system. Based on this false premise, the cost and price of goods and services produced by social infrastructure sectors were underestimated, which created conditions for non-equivalent exchange between national production sectors. Thus, the economic conditions in the social infrastructure sectors were deformed. These industries were artificially removed from the system of market relations and competitive environment. The
market form of management assumes equal economic conditions for all forms of ownership, and their diversity allows creating a competitive environment. This equality of ownership forms is the basis for the development of competition, competition, and achieving high economic efficiency.

The non-market nature of the main branches of social infrastructure does not mean that they are not part of the market system of management and should have other forms of management. For more qualified management of non-market oriented industries, state-owned enterprises are used. It is the state form of ownership that allows more qualified management of social activities at social infrastructure enterprises. However, we should not forget that state property also functions in a market economy and must adhere to the basic principles of management.

This, of course, does not mean that the forms of management of all branches of national production in a market system are identical. It seems that profit will remain the main goal of management for the market economy for a long time. The competitive principle of the market economy is the credo of this system, which determines its progress. As for the sectors of social infrastructure that have a non-market nature, the main priorities are other factors – mainly the quality characteristics of goods and services produced. This is why public property is best suited for this type of activity. Consequently, the mechanism for managing social infrastructure sectors should take into account these features in relation to the conditions of the market system.

We must recognize that the creation of public non-commercial goods and their consumption is no longer a purely market sphere of activity. Market principles of management do not always fit into the management system of post-industrial civilization. Therefore, economic science faces the task of timely substantiation of those new phenomena that are born under the influence of dynamic development of scientific, technical and social progress. At the same time, it is not possible to get ahead of ourselves prematurely, forgetting about the realities, without taking into account, which it is impossible to move forward at the current stage of economic development.

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