The Improvement of the Society's Social Life - One of the Most Important Tasks of Urban Planning

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Abstract. The article touches upon the social issues of urban planning at the present stage of urban development. It is shown that the rapid growth of cities leads to numerous negative phenomena: environmental pollution, degradation of public spaces and decrease of green spaces. At the same time, the indicators of the availability of service and household institutions are deteriorating. To improve the situation, it is proposed to review the normative indicators of service institutions and switch from resource design goals to social goals, which will provide citizens with more comfortable conditions with significantly lower costs of funds and territories.

Introduction

In the 21st century, for the first time in the history of human development, the number of urban residents exceeded the rural population [1], while at the turn of the nineteenth and twentieth centuries, this number was only 10%. The share of urban population worldwide is projected to be 75% by 2025. These numbers already show the success of the urban model, which was invented over seven thousand years ago. However, a success which is too great may once lead to collapse, as time has shown urban regions greatly exacerbate the environmental problems threatening the Earth. Now cities already contribute more than 75% of the world's environmental pollution and take more than 70% of the energy consumed by mankind. In the 1990s, there were 35 metropolises around the world in 22 developing countries with a population of more than 5 million people, and by 2000 this number would be doubled. By 2025, the number of urban residents in developing countries will increase by 2 billion, and half of them will not have access to basic facilities such as water supply, electricity or sewage. Most probably, extremely conflict-ridden, unhealthy and unmanaged urban populated areas inhabited by disorganized masses of hopeless and alienated individuals will emerge, and the already massive pressure on the environment will increase significantly [2].

Materials and Methodology

The research methodology is based on the analysis of foreign experience, cartographic materials and urban design. Territorial - design problems are one of the key problems of urban design. Taking into account the main problems of organizing urban space, the norms and rules for the design of service establishments are determined, which directly affects the social life of the population. The problem of the service of the population is directly related to the accessibility. If earlier the amount of shops and the radius of accessibility more or less corresponded to the urban planning indicators, then in a market economy, in the complete absence of control by the city authorities, a paradoxical situation has developed: bookstores and kindergartens have disappeared, grocery stores have reduced standard service areas, schools have made their territories smaller, sidewalks have been filled with stalls of questionable design and product range.

With all the variety of aspects of criticism of the "normative" approach to urban design, everyone is unanimous in determining its vulnerability - insufficient attention to available resources and opportunities. Therefore, it is not surprising that as the size and complexity of the internal structure of the cities increases, the reasonability of using scientific forecasting methods in the field of urban

design increases as well. Thanks to this approach, the preparation of urban designs acquires the features of scientific and technical forecasting [3]. The task of assessing and comparing the social usefulness of any type of activity, products of activity and natural resources allows us to speak about the need to combine natural (qualitative) characteristics and the indicators of social usefulness of (quantitative) characteristics.

One of the fundamental issues related to improving the life quality of residents in big cities is the problem of improving the services for the population. According to the accepted service norms, when the nomenclature of service establishments is based on Building Code, it is practically impossible and at the same time unreasonable to meet these needs in that particular situation from the point of view of rational use of resources.

Summary and Discussion

Let us take sports facilities as an example. According to the norms for serving those living in the residential area, it is necessary to place a sports core with a football pitch, running tracks, a swimming pool, changing rooms, etc., while the required area for these facilities should be from 5 to 10 hectares. This is almost an impossible task. Or let us consider the problem of providing city residents with the necessary amount of green spaces. Where to find so much space in the city centre? Meanwhile, these problems can be solved by reconsidering the traditional approach to urban design. It is necessary to shift from resource design goals to social goals. For example, not to set the task of providing so many square meters for sports facilities or green spaces per 1000 inhabitants, but to provide an opportunity for a certain number of people to go in for sports. The provision of green spaces should be taken into account not in square meters per 1000 inhabitants, but green spaces in the city centre should generate a viable amount of oxygen. At the same time, not only the number of inhabitants of the central zone should be taken into account, but also its daytime population. Only for sports facilities, the required area can be halved if the problem is approached not from a normative, but from a social point of view. For example, it is necessary to provide 10% of residents or one hundred thousand residents of the city with the opportunity to be engaged in physical education and sports. The number of one hundred thousand inhabitants has not been chosen by chance, this is how many people could have gone in for sports in the 1980s, given the standard provision of the city with sports facilities. However, according to urban planning norms, 900-1000 hectares of flat areas in the city were required at the same time. Research works conducted by the author in 1978-1982 related to this issue led to the development of the "General layout'' of physical training and sports facilities in Yerevan for the period up to 2000, which was highly appreciated by the “Gosstroy” of the Armenian SSR. Its implementation would enable a normative number of residents to engage in physical training and sports, with the placement of the entire network of facilities on an area that is more than twice as small as an area of 400-420 hectares. This economy of territories occurred due to the increase in the intensity of sports facilities usage; the implementation of new types of structures, the differentiation of the elements of the sports core of the most earth-capacious structure into constituent elements in the form of terraces, the use of transformable gyms, etc. Currently, due to the emergence of fitness clubs, various exercise machines, and treadmills, the economy of the territory would be more significant in problem solving.

In conditions of high seismicity, it is necessary to place school buildings in areas favorable from the point of view of seismic safety, ignoring the radius of accessibility. This will save space if several schools cooperate with one sports core, will improve the opportunities to take up sports and will improve school grounds. At the same time, children from primary grades are transported on school buses as in many foreign countries - USA, Canada, and the Czech Republic. As for green spaces, based on the possibilities of processing carbon dioxide, there is a difference between their types. For example, a thirty-year-old poplar gives seven times more oxygen than a pine tree of the same age, not to mention other types of trees. A mixed forest with an area of 0.2 hectares is capable of producing 62.5 kg of clean air per hour (which is sufficient for 1800 people), absorbing 92 kg of carbon dioxide and lowering the air temperature by 5 degrees [4]. Apparently, a cluster of trees is more reasonable than a total area of trees growing separately. Here it is worth mentioning the Central Park in New York with an area of 34 hectares.

Considering the situation in the sphere of trade, we can say that the greatest changes have taken place in this sphere. The emergence of online stores and the widespread introduction of home delivery have transformed this service system. The Covid pandemic has complicated the situation even more. Urban planners face the challenges of modern lifestyle and many design challenges need to be reconsidered in this respect.

Conclusion

The reasonability of transition from design at the level of resource goals to design at the level of social goals is revealed. This enables a wide maneuver with urban planning resources to achieve the set goal with their rational use. Planning at the level of social goals opens up a wide field of activity for designers, sets up opportunities for a creative approach to solving the tasks assigned. This circumstance is especially important during design under conditions of high seismicity, since situations requiring non-standard solutions often arise: here the rational use of urban planning resources is necessary due to the forced rise in construction costs in order to ensure the safety of the population [5].

The task of modern urban planning from a philosophical point of view is to reasonably and rationally build social life to a certain degree of perfection than the historically established standard of living" [6].

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