

# Improvement of social infrastructure as a way to ensure a comfortable urban environment

Elena Stein<sup>1,\*</sup>

<sup>1</sup>Moscow State University of Civil Engineering, Yaroslavskoe shosse, 26, Moscow, 129337, Russia

**Abstract.** In the 21st century the mankind to came to understanding that the comfortable living environment is the basis of a high-quality life, which represents the strategic resource of the state. The comfortable environment consists of numerous factors, which include the social infrastructure as well. The author of the article stats with the statement that the project of creation of the comfortable urban environment includes: economical, commercial and budget efficiency of the project, ecological consequences or results of the project impact on the environment, contribution of the project implementable to improvement of the social environment. Developing such approach, the author comes to a wider concept of the life quality. Thus, all three elements of the project of creation of the comfortable urban environment influence the quality of life of the population. According to the research results, presented in the article it becomes obvious that medical-and-demographic characteristics are being improved when the development of housing is followed by the corresponding development of the social infrastructure. Thus, the author makes the conclusion that for the solution of the task of creation of the social infrastructure as the environment for a healthy lifestyle, development of managerial decisions, which are made not on intuition basis but on rational estimation taking into account above-mentioned factors are necessary.

## 1 Introduction

The project of creation of the comfortable urban environment is known to include three aspects [1]:

1. economical aspect (economical, commercial and budget efficiency of the project which is necessary for the implementation even of the socially useful project. Without this aspect the implementation would not be reasonable, especially in the conditions of deficit of investment resources);
2. ecological aspect (ecological consequences or results of the project impact on the environment) [2-32];
3. social aspect (contribution of the implementable project to the improvement of the social environment and as a result, - to the improvement of quality of population) [7].

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\* Corresponding author: [shtejn.elena@yandex.ru](mailto:shtejn.elena@yandex.ru)

Social-and-economic development evaluation of residential locations is based on the creation and responsible maintenance of the healthy artificial habitat. The public health can be determined as the health of the population in general, developing under the influence of social and biological factors. It is estimated by certain indicators: main (life expectancy, mortality rate, birth rate level, indicators of incidence, physical development) and additional medical-and-demographical and sociological. Health can be considered and as the set of three elements:

1. physical well-being, which is the ability of the person to keep daily physical activity, full work estimated, taken into account some personal characteristics: age, sex, labor skills, nature of professional activity, regional living conditions.
2. mental well-being, which is the ability to monitoring of the behavior and emotions, cognitive activity and also to experience of positive emotions which are characterized by certain frequency and intensity.
3. social well-being, which is the satisfaction of the person with his or her place and role in the society, his or her relations with colleagues, friends, acquaintances, level and quality of life.

Developing such approach, we will come to the wider concept - the concept of life quality.

## 2 Methods

Thus, the three elements of the project of creation of the comfortable urban environment influence the life quality of the population.

Commercial effectiveness of the development of the residential location promotes:

- the increase in level of the income of the population;
- the increase in the level of development of the consumer market;
- the best provision of the population with material benefits,
- the decline in unemployment, growth of the income of the population, decrease in the load of the relevant budget for the social security.

The budget efficiency of the development of the residential location means the cash inflow to the budget of the respective region, strengthening of its revenues, and, therefore the availability of resources for programmes for the improvement of all the indicators of the life quality. The aspect of ecological safety within the development of the residential location means absence, minimization or compensation of negative consequences of projects, achievement of favorable condition of the surrounding environment.

Social efficiency of development of the residential location, covers all the blocks creating the life quality of the population, particularly the increase in the level of development of health care and education. It is necessary to recognize that the indicators of life quality in our country lag behind the level of life quality in the countries of Europe.

Let us consider the following data. (Table 1)

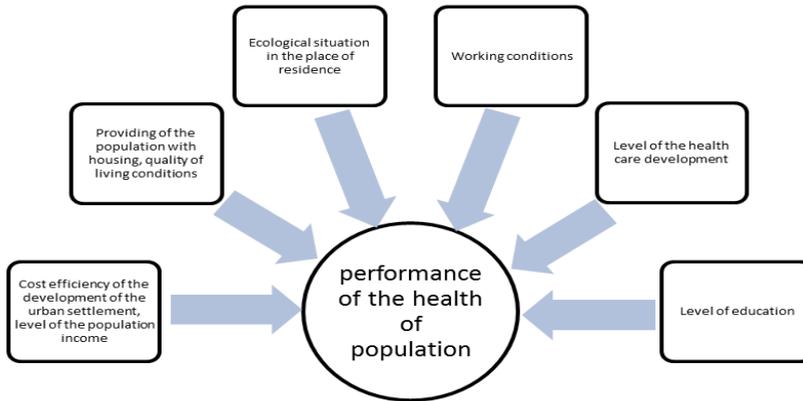
**Table 1.** Example of calculation of the life quality index according to "European sociological research" (scale from 0 to 10 points).

Spheres of the life quality	Countries		
	Finland	Poland	Russia
Health	5.4	3.8	3.5
Well-being	8.0	7.1	6.2
Employment	6.2	6.6	7.1
Safety	8.1	8.6	7.5
Environment	3.3	3.1	2.9
Education	7.9	6.0	4.3
Democratic management	5.9	4.5	4.2
Participation in the social life	2.2	0.6	0.7

Satisfaction with the life	7.9	7.0	5.7
Life quality index	5.7	5.2	4.7

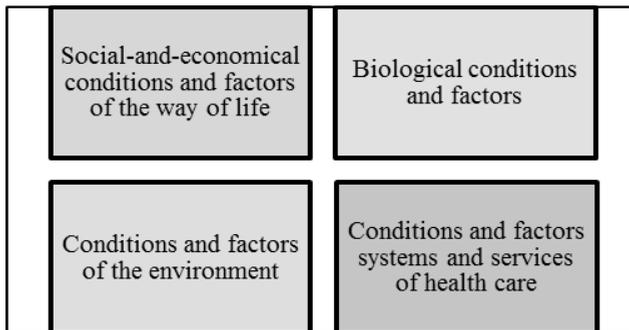
In our opinion within the consideration of the quality of life of the population the major role among the components of the life quality should be played by the population health.

It is necessary to recognize, that the three aspects of the development of the residential location (economical, ecological and social), and also all the factors of the life quality influence in some degree the performance the of citizens health (Figure 1).



**Fig. 1.** Influence of components of the life quality on the performance of health the population.

Both domestic, and foreign scientists, name the indicators acting as risk factors for the performance of the population health. It is proved that among the influences causing the performance of health and illness, all the factors can be distributed into 4 groups presented in Figure 2 [7].



**Fig. 2.** Groups of factors, influencing the health performance.

### 3 Results

According to the expert assessment of World Health Organization, the performance of health of each person depends on four factors: the gene programme of the organism – 20%, ecology – 20%, medical service – 10% and way of life – 50%. Thus, the decisive impact on the formation of health of any person is exerted by his or her way of life.

Factors included into each group are listed in Table 2.

**Table 2.** Factors, influencing the performance of the person's health.

Way of life	Genetics, anatomy	Environment	Quality of health care
<ul style="list-style-type: none"> <li>• smoking;</li> <li>• alcohol;</li> <li>• drugs;</li> <li>• unbalanced food;</li> <li>• stress;</li> <li>• abuse of medicines, side effects of medicines;</li> <li>• dangerous and harmful working conditions;</li> <li>• loneliness, family disorder, depressions after divorce or loss of relatives;</li> <li>• low cultural and educational level;</li> <li>• high urban saturation;</li> <li>• low income level, poor material living conditions.</li> </ul>	<ul style="list-style-type: none"> <li>• predisposition to hereditary diseases;</li> <li>• predisposition to degenerate diseases</li> </ul>	<ul style="list-style-type: none"> <li>• water, soil, air pollution;</li> <li>• sharp change of atmospheric processes;</li> <li>• the increased solar and space, radiation and magnetic radiation</li> </ul>	<ul style="list-style-type: none"> <li>• inefficiency of preventive measures;</li> <li>• poor quality of medical care;</li> <li>• untimely medical care</li> </ul>

The leading role among the aforesaid factors is played by the way of life which specific weight of the total influence of characteristics makes more than 50% of all causing impacts on health of the population. About 20-25% are the share of environmental pollution, 15-20% for biological factors and about 10-15% make activity of institutions (services) of health care, such ratio of the causing factors treats both health, and an illness. These factors act as risk factors to the performance of health [7].

Let's consider the influence of quality of the urban environment on the performance of the person health.

The urban is the complex of conditions in which the person spends the most part of the life, and this environment makes the greatest impact on the rhythms of vital activity and behavior of the person. Several factors participate in forming of a certain environment: economical factors (budget, manpower, level of the income), climatic factors (climate, land relief), ecological factors (impurity of the territory), factor of time (technical and physical obsolescence of the territory), urban saturation (infrastructure) and socio-political structure (number and structure of the population, crime rate).

The urban territory is the multi-level complicated multicriteria body with settled, created earlier and functioning social-and-economic relations which are created at the moment.

Comfort of the city as the living environments, is in turn determined by several major factors:

- transport availability;
- availability of all the necessary services, from the state services to trade services;
- availability of enough public space;
- new principles of planning of the cities providing so named "step availability" of the services, reducing the movements around the city, raising intensity of life of certain areas and cities as whole.

It is obvious that providing the high-quality life requires development and enhancement of social infrastructure within the urban environment. Thus, the creation of comfortable

living environment which allows citizens to satisfy their housing requirements and to provide high quality of life in general will become the purpose of both urban and housing policies. Infrastructure is an economic category which represents the part of the goods production sphere, promoting the receipt of great amount of end products.

The social infrastructure is the set of industries of economy and types of activity, which functional purpose is expressed in production and rendering of services and the spiritual benefits for the population. The term "social infrastructure" has begun to be applied widely in economic literature recently. It means population services industry, or service trade etc.

Functions of the social infrastructure are the following:

1. Education of younger generation, receipt of qualification, retraining (education, training);
2. Increase in duration of the period of working capacity (health care);
3. Prevention of labor productivity decline during the working day (public catering, passenger transport);
4. Providing conditions for rest of workers, increase in their cultural level (sport, housing, culture, art).

Indicators of life quality of the population include providing and scope of the population with infrastructure facilities and technical means of the industry social sphere:

- number of the enterprises of household services;
- number of educational institutions;
- number of students;
- number of medical personnel;
- number of cultural institutions and organization of rest.

These matters should be interconnected for the increase in comfort of accommodation and improvement of the performance of health of the population, as the link between them is obvious.

Social infrastructure include sports-and-improving complex which is the set of the industries and enterprises, which are functionally providing the organization of activities in the field of physical culture and sport. The efficiency of functioning of sports-and-improving complex of the cities, which development attracts considerable attention nowadays, is one of the factors of growth of level and quality of life of the population. The V-th Congress of "United Russia" Political Party in 2004 made the decision on the assistance to development of physical culture and sport in Russia, aimed on the improvement and promotion of a healthy way of life.

Recently the Government has begun to deal with these issues, as the level of comfort of the living environment in the country was beginning to worsen considerably. It is only about large megalopolises, such as Moscow, St. Petersburg, Kazan, etc., and about the whole territory of the Russian Federation as well.

The assessment of health of the population is one of the most important points of the analysis for the acceptance of managerial decision in the system of housing and communal services, particularly in case of the solution of the matter of location of harmful productions or on the contrary by the consideration of feasibility of creation of sports-and-improving complex, medical institution, educational institution, leisure centres, etc.

As decision making concerned taking into account analysis and assessment of health of the population, it is possible to conclude that the decision of the authority must be exclusively rational.

The research work on the subject "Research of Quality of Life in the Russian Cities", completed in 2014 by Financial University under the Government of the Russian Federation is also of great interest. Within the approach used by authors high quality of life implies first of all the following features:

- life expectancy and high-quality medical attendance, which maintain it,

- access to knowledge (quality of education),
- level of material well-being,
- safety of the personality.

## 4 Discussion

The purpose of urban and housing policies is the creation of comfortable living environment which allows citizens to satisfy housing requirements and to provide high quality of life in general. The efficiency of such policy significantly increases in case of its territorial differentiation taking into account the social-and-economic and demographic prospects of the development of regions, cities and other settlements. For the development of such policy, both on state, and on regional levels, and adoptions of qualified decisions on the development of the cities and other settlements, the task of the quality evaluation of the urban environment is crucial.

The international experience proves that it is possible to estimate the quality of the urban environment by various methods, with the use of various techniques which cornerstone are different approaches to the interpretation of the concept "urban environment". At the same time the common feature of the majority of such techniques is the use of more or less fixed set of indicators (indicators) (which both are objectively measured, and subjectively estimated), in different combinations, characterizing such spheres of city life as transport connectivity, housing conditions, availability of services, ecological situation, improvement, safety and feeling of comfort of the urban environment by inhabitants.

## 5 Conclusions

Thus, the public health is estimated in the complex, from the point of view of both high-quality, and quantitative indicators. The authors studied a great number of cities of the Moscow region in the sake of the determination of influence of development of the social infrastructure on the comfort of the living environment.

According to the research results, which are presented in the article it becomes obvious that medical-and-demographic characteristics improve, when the development of housing sector is followed by the corresponding development of the social infrastructure. Thus, we can conclude that for the solution of the task of creation of the social infrastructure as the environment for a healthy way of life, development of managerial decisions, which are not based on intuition or judgments. The managerial decision should be necessarily made, basing on rational estimation, taking into account aforesaid factors.

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