
METHODOLOGICAL APPROACHES OF ASSESSING POPULATION QUALITY OF LIFE AS A FACTOR DETERMINING DEVELOPMENT OF THE MARKET INFRASTRUCTURE

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Abstract

The objective of this work is developing and investigating the methodology of assessing population quality of life as a system of value characteristics. The concept of quality of life is focused on efficient use of the socio-economic potential. The analysis of socio-economic indicators of the potential can be performed within its structural components and the overall assessment of its value – using basic indicators characterizing population quality of life. Comprehensive assessment of population quality of life covers the areas relating to assessment of objective quality indicators based on the infrastructure standard suggested for implementation and that of subjective indicators – based on market infrastructure monitoring. The level of population quality of life has been presented in the form of overall indicators allowing to assess population activity conditions at a maximum possible level. The approaches to assessing quality of life have been presented in the form of the system of indicators consisting of three levels focused on satisfaction with different activity areas based on formation of the tree of objectives. The procedure of measuring quality of life can be presented in a form of a pyramid in the basis of which primary non-uniform features can be found and at the top—overall indicators obtained as a result of harmonizing the primary data. The result of this article is a sectional research based on which group (overall) indicators are calculated based on correlating of data of the objective and subjective assessment of commercial services quality. Optimal placement of trade enterprises on the territory of the entity is one of the most important administration tasks both in terms of satisfying the consumers' demand and the competition factor in a trade area. Therefore, development of the infrastructure standard as a comprehensive integral indicator characterizing population quality of life is a very important research line. Prerequisites for development of the infrastructure standard which is one of the tools for the economic diagnostics of the market infrastructure in a separate region have been determined as essential conclusions in the work.

Keywords: market infrastructure, quality of life, development strategy, socio-economic potential, trade area

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1. Introduction

Currency of the research issue chosen is conditioned by the need in grounding the indicators of socio-economic development of territories determining population quality of life and their comparison with the results of the analysis of external conditions which establishes the base for forming the scientifically proven concept of the research [1, 2].

When developing the strategic development objectives and the mechanism for implementation of the concept 'population quality of life' it is necessary, first of all, to focus on efficient use of the socio-economic potential assessment of which is one of the most important tasks [3].

The initial stage of creating the development strategy is the stage of collecting and analyzing the data of socio-economic development of the region including the analysis of influence of internal (population quality of life, condition and efficient use of the socio-economic potential, economic and ecological situation, control system condition etc.) and external factors (interests of different management and business entities). The analysis of socio-economic indicators of the potential can be performed within its structural components, and the overall assessment of its value – using basic indicators characterizing population quality of life.

For the purposes of the analysis of socio-economic development of regions, strategic monitoring of its condition and timely detection of problems the system of indicators should eventually come to a single (comprehensive) indicator through measuring the value of which we can estimate development rates and line and perform a comparative analysis of regional economics. We consider that such a comprehensive indicator is the indicator of population quality of life which is taken into account when estimating the infrastructure standard [4, 5, *Concept of development of the consumer market in Krasnoyarsk for the years 2006–2010*, Resolution of the Krasnoyarsk city administration of 25.09.2006, No. 793].

Quality of life is considered as a system of value characteristics of life activities of individuals (social groups, strata, households etc.) as well as conditions for their implementation. It is connected not only with satisfaction of population physiological needs (food, rest, safety etc.) but also with possibility of its implementation in spiritual communication, self-realization and other types of life activities. At the same time quality of life is characterized by freedom in development of a separate person and society, satisfaction of a person with conditions of life, social relations and environment [2, 3, 6].

2. Methodology

The comprehensive assessment of population quality of life should cover two areas: assessing objective quality indicators based on the infrastructure standard suggested for implementation; and measuring subjective population quality of life based on market infrastructure monitoring using specially

designed questionnaires. Use of these measures as a whole will allow obtaining not only assessment of quality of life using statistical indicators but also detecting hidden causes for population dissatisfaction. To perform the comprehensive assessment of population quality of life the relevant methodology shown in Figure 1 has been suggested [3-5].

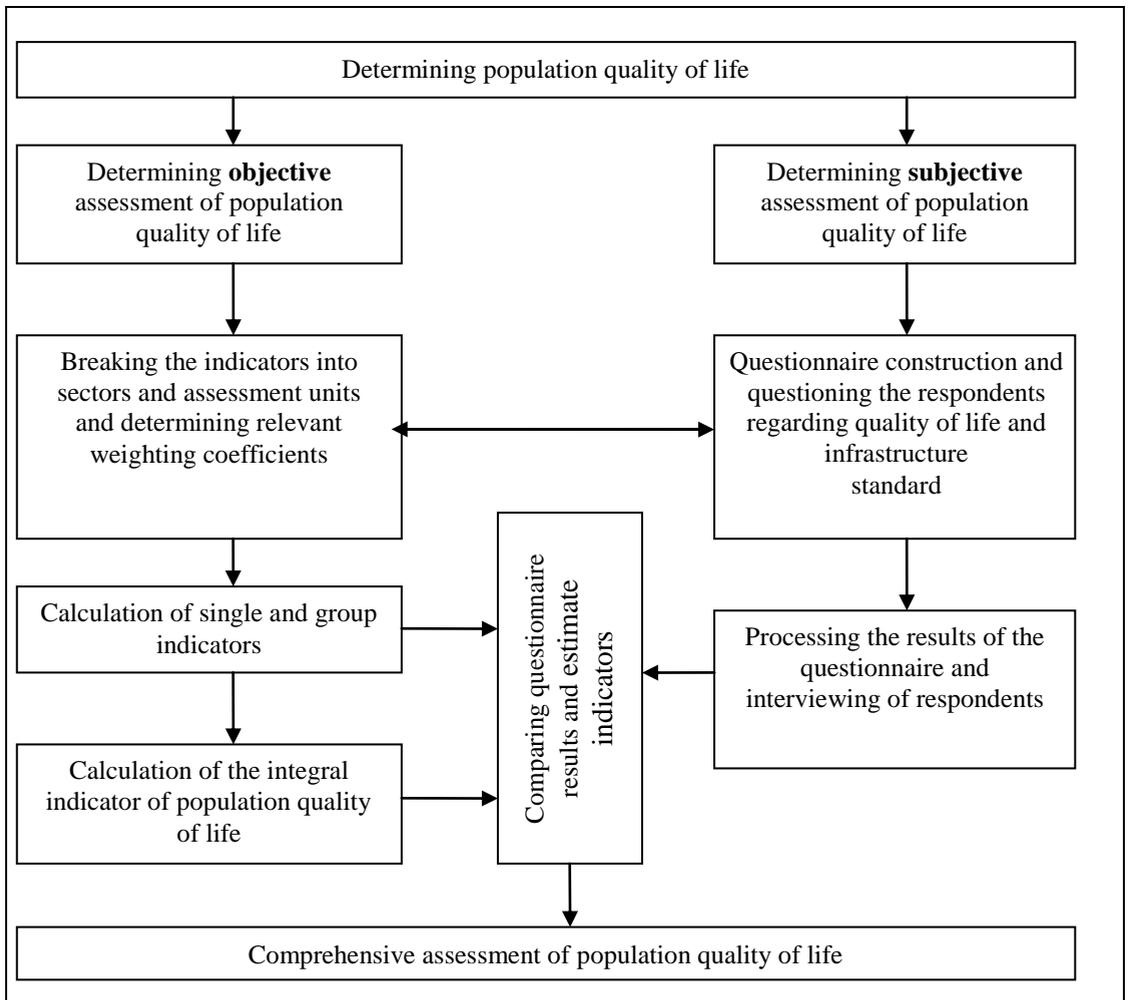


Figure 1. Methodology of comprehensive assessment of population quality of life.

To comprehensively assess the level of population quality of life it is necessary to present it in the form of overall indicators allowing to assess conditions of population life activities at a maximum possible level. Thus, the procedure of changing quality of life can be presented in a form of a certain pyramid based on which primary non-uniform features can be found presented in multitype scales of different levels and at the top – overall indicators obtained as a result of harmonizing the primary data. The system of indicators for objective

assessment of population quality of life consists of three levels shown in Figure 2.

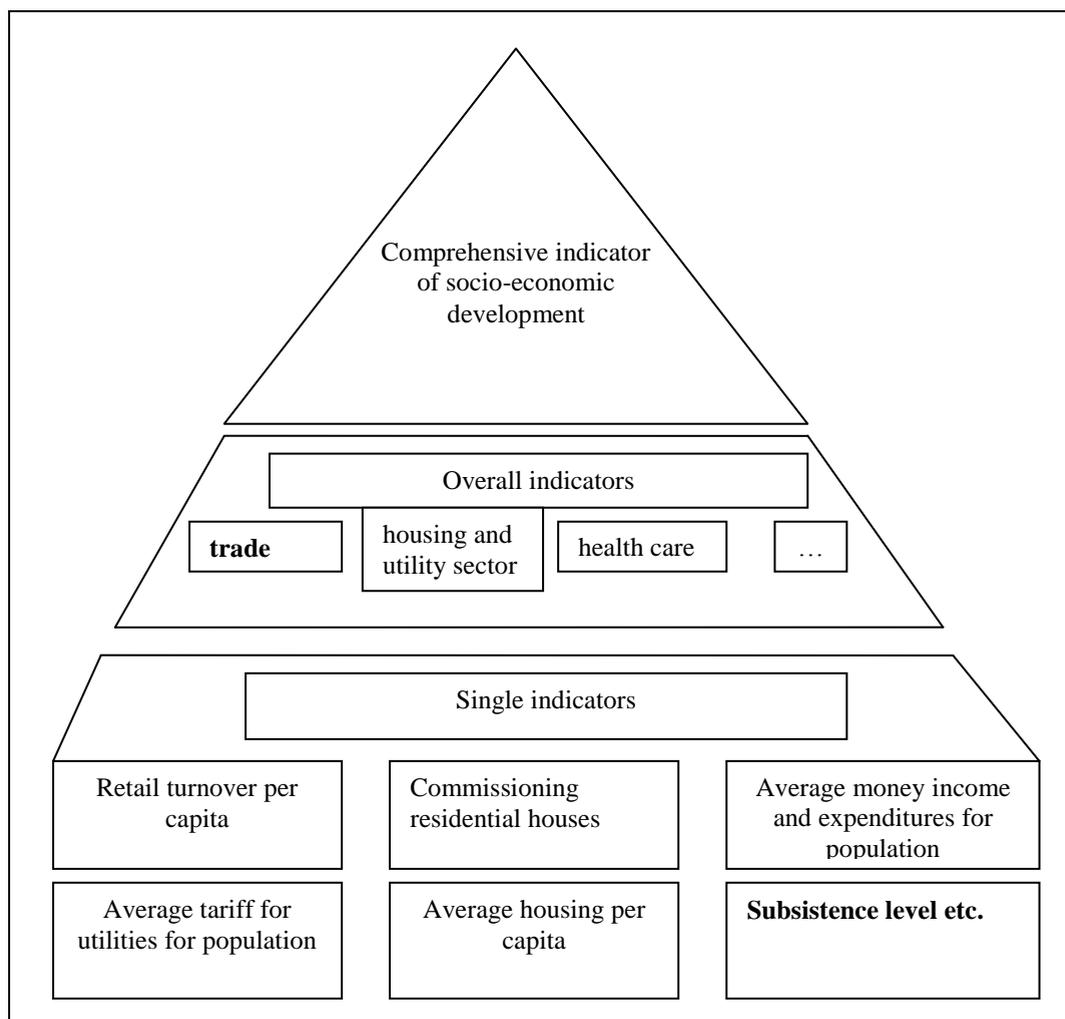


Figure 2. Levels of assessment of population quality of life.

Group indicators ensure satisfaction of a person with different areas of life based on formation of the tree of objectives and include the following assessment indicators: population employment, population income and expenditures, condition of education, health care, social security, culture and leisure, consumer market and sphere of services, housing and utilities sector, economic development, environment and public safety.

The basis for comparison of estimate indicators for quality of life is mean value for the region for each time period analyzed. The assessment of single indicators of quality of life is performed using the following linear dependence:

$$Q_i = \frac{P_i}{P_{ri}} \quad (1)$$

where Q_i – value of the single indicator of population quality of life, unit;

P_i – value of the indicator for quality of life in a region, unit;

P_{ri} – mean value of the indicator for quality of life in a region, unit.

3. Results

To identify single indicators of quality of life by the level of their influence on the quality process it is suggested to divide them into two groups:

- indicators describing positive processes, i.e. the higher the indicator value is the higher the indicator of population quality of life is assessed;
- indicators describing negative processes, i.e. the lower the indicator value is the lower the indicator of population quality of life is assessed and they refer to the category of unfavourable ones.

Table 1. Matrix of comparing group and subjective indicators of various aspects of population life activities.

Objective/ subjective assessment	Comprehensive indicator	Group indicators	Conclusions
Quality of life of population as a whole	Coincide	-	Additional researches are not required
Assessment by areas of activities	-	Coincide	
Quality of life of population as a whole	Coincide	-	Specific analysis of the aspects of life activities is required
Assessment by areas of activities	-	Does not coincide	
Quality of life of population as a whole	Does not coincide	-	Additional researches for problem specification are required
Assessment by areas of activities	-	Coincide	
Quality of life of population as a whole	Does not coincide	-	Revision of the system of indicators and additional researches are required
Assessment by areas of activities	-	Does not coincide	

Initially all single indicators are calculated based on which values of group indicators are determined and then the comprehensive indicator of population quality of life is calculated. One of the most essential and key issues

of change in subjective population quality of life is the issue of choosing the main criterion for assessing quality of life by a person or household which would be rather clear and unambiguously acceptable. The latter is especially important so that we could speak about identity of results recorded in the course of work. Therefore the sectional research has been suggested in the article through which group (overall) indicators are calculated which is determined by the possibility of comparing data of the objective and subjective assessment. The comprehensive indicator – subjective indicator of quality of life, relevant group and subjective indicators of various aspects of life activities of population are compared separately in the form of a matrix shown in Table 1.

It is necessary to note that the specified options are rather relative as the objective assessment is given in comparison with the mean one in the region. Thus, if quality of life in a region as a whole is low the discrepancy between the estimates and data obtained as a result of researches will be accordingly large. One of possible solution of the problem is searching a new basis for comparison of the indicator used in calculations or creation of new indicators one of which is the infrastructure standard characterizing both population quality of life and possibilities of strategic intervention in regional economics. Thus, determining population quality of life is the prerequisite for development of the infrastructure standard which is one of the tools for economic diagnostics of the market infrastructure of the city [1, 2].

4. Discussion

Relative identity of this concept to the concept ‘trade area’ which is understood as the system of interrelated components including: trade enterprises, consumers and the infrastructure servicing them allow making a conclusion that the trade area is the core of the market infrastructure. It is limited by the geographic scope of the territory and is aimed at satisfying population needs in different goods and services. Upon achieving the objective set the quality living standard of population is increased and trade enterprises gain profit allowing them to successfully develop [7-14].

This area has a number of advantageous features main of which include high dynamism, spatial segmentation, high rate in capital turnover, predominance of small and medium-sized enterprises, running key operations in conditions of mutual contact relations with consumers [15].

Trade as control object is a complex developing economic system with a number of different connections, relations and components. Peculiarities of this area important to control include multiplicity and wide variety of trade enterprises and organizations of different forms of ownership as well as probabilistic nature of a number of processes (demand, purchase and consumption etc.).

Optimal placement of trade enterprises on the territory of the entity is one of the most important administration tasks both in terms of satisfying the consumers' demand and the competition factor in a trade area. Therefore,

development of the infrastructure standard as a comprehensive integral indicator characterizing population quality of life is a very important research line [16].

The main role in regulation of trade development is to retain the stable balance of interests of business entities. Therefore, the main regulation method is management by objectives [17].

5. Conclusions

Thus, target comprehensive programs as the most efficient method for regulation of the market infrastructure perform functions of integration of government, public and individual interests and relations, concentration of resources to implement economic projects. Implementation of infrastructure programs creates conditions for essential changes in population quality of life through the trade area which predetermines both development of industry and economics and solution of social tasks and contributes to satisfaction of population needs. Development of the target program in the trade area facilitating development of the market infrastructure requires relevant methodological and normative support based on the indicators of field researches, primary and secondary information about the condition and development of city trade which can be the subject for further researches. The obtained results of assessing population quality of life based on determining the infrastructure standard determine the level of development of the trade enterprise network, namely: presence and building density of trade enterprises of the city, stable development of the market infrastructure, number of trading facilities per 1000 inhabitants, distribution of the number of enterprises within allocated microareas and their grouping by zonation of the regions. These researches were conducted yearly from 2008 to 2013 and are the results of the research work on the market infrastructure. Restrictions of researches in identifying methodological approaches to assessing population quality of life are budget and time (static and dynamic) restrictions which facilitate development of the market infrastructure of a certain region. It is especially important to note the absence of adopted infrastructure standards determining specificity of development of the sector and separate regions which allows considering them as a subject for further researches. When determining the prospects for development and placement of trading facilities it is necessary to take into account actual availability and the level of network support for population, typological network structure, population demand for trade services, peculiarities and prospects of regional development which is eventually reflected on increased level of population quality of life.

References

- [1] J.J. Suslova, *Development of infrastructure standard as a tool for strategic management*, Proc. of the 5th Interregional Research-to-Practice Conference - Sphere of consumer services: current problems and development prospects, Krasnoyarsk State University of Economics and Trade, Krasnoyarsk, 2009, 68-72.
- [2] J.J. Suslova, *Market infrastructure: theory, methodology, problems of development (reproducing aspect)*, Ph.D. thesis, Krasnoyarsk State University of Economics and Trade, Krasnoyarsk, 2009, 351.
- [3] J.J. Suslova and E.A. Ufimtseva, *Evolution of the category "quality of life" in economics*, Proc. of the 2nd research-to-practice conference of graduate and doctoral students with international participation - Current problems of modern science and their solution, Krasnoyarsk State University of Economics and Trade, Krasnoyarsk, 2009, 124-129.
- [4] J.J. Suslova, *Population quality of life and its characteristics in assessing the market infrastructure of the city*, Proc. of the 4th Interregional research-to-practice conference - Sphere of consumer services: current problems and development prospects, Krasnoyarsk State University of Economics and Trade, Krasnoyarsk, 2008, 23-27.
- [5] J.J. Suslova, *Eurasian International Scientific-Analytical Journal Problems of Modern Economics*, **4(28)** (2008) 415-419.
- [6] S.A. Ivanov and E.V. Tishin, *Standards of quality of life in the social management system*, Institute of social and economic problems of the Russian Academy of Sciences, St. Petersburg, 1998, 64.
- [7] V.P. Fedko, *Infrastructure of the commodity market*, Feniks, Rostov-on-Don, 1990, 512.
- [8] N.V. Mordovchenkov, *Market aspects of the modern infrastructure (theory, methodology, experience)*, Gladkova, Nizhny Novgorod, 2002, 394.
- [9] F. Stewart, *Planning to Meet Basic Needs*, Macmillan, London, 1990, 23-37.
- [10] B. Balk, *Econometrica*, **1** (1990) 58.
- [11] A. Campbell, *The Sense of Weil-Being in America. Recent and Trends*, McGraw Hill, New York, 1981, 264.
- [12] A.V. Feigenbamn, *Total Quality control*, McGraw Hill, New York, 1961, 365.
- [13] A.V. Feigenbaum, *Total Quality control*, Proc. of International conference on quality control, Ohmsha Ltd., Tokyo, 1969, 17-20.
- [14] G. Holl, *Subjective measure of life in Britain*, Oxford University Press, New York, 1995, 19-27.
- [15] A.S. Novoselov, *Theory of Regional Markets. Textbook*, Feniks, Rostov-on-Don, 2002, 448.
- [16] G.K. Lapushinskaya and A.N. Petrov, *Planning in market conditions. Study guide*, Dashkov and Co, Moscow, 2003, 252.
- [17] V.N. Arkhangelsky, A.V. Budarina and V.S. Bulakov, *Government regulation of market economy. Course book*, V.I. Kushlina (ed.), 3rd edn., RAGS, Moscow, 2006, 615.