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POVERTY AND SOCIAL ACTIVITY MAPPING IN THE CITY OF TYUMEN, RUSSIA

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ABSTRACT
The paper presents research conducted in the city of Tyumen, Russia to understand the interdependence between poverty and social activity indicators. The method applied was a descriptive-analytical method based on the field-based data. Sample size amounted to 960 respondents with the confidence level of 95% and a sampling error of 3% was random and representational. For conducting descriptive analysis, processing utility tables of database in Geographic Information System (GIS) framework, based on MapInfo Professional software, was used. The classification of urban neighborhoods based on natural-historical principle of dividing the territory is proposed. The applied social mapping method and GIS framework allowed analyzing the problems of the social space of the city. The paper proposed three levels of the mapping process and various map types depending on the selected poverty indicators. Positive and negative individual perceptions and evaluations of social conditions in the modern social space of Tyumen city were revealed. Social mapping of those manifestations reflected their territorial location.

Keywords: poverty, social mapping, social activity, social planning, Russia

INTRODUCTION
The crisis situation in Russia is no longer a bright manifestation in various sectors of the economy, such phenomenon has reached complex systemic status, creating a functional “funnel”, spanning in all spheres of social and economic life of the state as a whole and in particular areas. Anti-crisis measures taken by the administrative teams of federal, regional and municipal levels, aimed at import substitution, activation of investments, industrial development are not bringing tangible results, especially in the short term. Industrial production decreased by 3.4 percent, real income of population – by 4 percent [1]. Basic resources of area development (economy, taxes, the budget, etc.), traditionally used in the management, and which the administrations are based on, reduced. The federal budget deficit in 2015 amounted to 2 trillion rubles (4 percent – loss of revenue part, 5 percent – an increase in the expenditure side due to the fulfillment of social obligations).

This situation can be traced in almost all regions of Russia. 89 percent of the subjects of the Russian Federation have consolidated budget deficit of 1 to 23 percent of the total GDP. These trends ascertain the facts of region financial insecurity, of reducing the
financial support of the territorial administration and management teams, the possibility of their rapid response to changing conditions, the formation of regional and local budgets and, as a result, decrease in management performance. This is confirmed by reduction in expenses for significant to the population spheres – housing and communal services, culture, education, health care (more than 50 percent of Russian regions have reduced the cost of these items). The reduction of budgetary financing makes it necessary to increase the share of population finance resources in these sectors. In the face of declining incomes of the population this will lead to a significant reduction in the standard of living and increased poverty, growth of popular discontent and reduced confidence in the management structures.

The need to overcome the negative crisis trends requires the administrative teams of different management levels to respond rapidly and search opportunities to use non-financial resources, maintain social and economic stability, and develop social potential.

**SOCIAL ACTIVITY AS A DEVELOPMENT RESOURCE**

Analysis of the development strategies of many Russian municipalities showed that they put human development and human capital at the forefront, and as a basic foundation to achieve these goals they are based on the need for intensive development of the economy, efficient use of the material resources of the society. But these resources are not enough, which naturally leads to the idea of the need to use other development resources, preferably an inexhaustible and renewable one, which happen to be the activity of the population. We would like to clarify that we are not talking about the use and application of methods and management tools of mobilization, on the contrary, the search is in the plane of everyday practices, motivational and conscious actions of individuals who do not separate the development and welfare of society, region, city, area from their own. Human capital gains creative function if social qualities are developed, if there is local identity, social norms as regulators of relations are accepted, if the active position of citizens becomes significant and the resulting nature. This approach determined the need to find other grounds of municipal development, where human capital is not a passive result, an abstract product of a high quality life or self-development of the individual, but the active element of social development.

The development of the municipality is made dependent on its ability to create, by using management tools, conditions that activate the internal factors and elements of the system, both general and specific. The main subjects of the development of the municipality are: management system, the local communities and active citizens.

The current status and trends of development are characterized by the acknowledgement of activity of the population as the form of a progressive resource and sustainable development, the need to transfer it from the destructive into a constructive tool. This resource, and simultaneously the tool have to be used in the practice of municipal administration. Systematic, organized and ordered relationship interaction between the population, its active part and the authorities not only allow to synchronize and coordinate the development objectives, identify priorities and possible solutions, but to go from passive forms of management to constructivist forms. Therefore, we need conditions for activity and for mechanisms to transfer this activity to the plane of the adoption of specific management solutions, through technology, tools, and organizational processes.
At the municipal level, despite the legislatively fixed forms of public involvement in local government, municipal organs are not very active to use residents’ resources to meet the strategic objectives of management and development of the territories. The system of interaction between the administrative team of the municipality and the population is not working properly. An analysis of social practices shows that it provokes spontaneous realization of amateur activity of inhabitants in order to solve local problems and improve living conditions in a particular area. The social activity of the population is implemented in the solution of domestic, cultural, educational, social issues, issues of entrepreneurial initiatives in the municipalities.

Accordingly, it is necessary to change the principles of interaction between the population and the authorities. Traditionally, governments attract the active part of the population to solve all sorts of problems, setting goals, objectives, defining methods and mechanisms to achieve them. Practice shows that this is not enough, the individual, group, and community, are not motivated to take action. The result is apathy, people do not want to participate in public affairs, and it even comes to the hidden sabotage. You may need to change the vector of the work of municipalities, not to offer, and not to call for action, but act as the administrative resource of goal achieving, solving problems, which put the citizens themselves. The population is seen as a real, rather than imaginary customer, the expert, the controller and the active co-executor of social services in their territory.

**METHODS AND MATERIALS**

**Measuring Poverty and Social Activity**

Various concepts concerning poverty have been developed. Ovcharova [2] points out the limits of an analysis and measure of poverty based on the official approach in Russia, which does not take into account nonmonetary forms of poverty. The authors have already observed monetary, unmet basic needs, human development opportunities, social exclusion, and participatory approaches of poverty [3]. Gustafsson and Niverozhina [4] among the first have started to study poverty in urban Russia using microdata for the town of Taganrog. Moreover Gustafsson and Jansson [5] published a deep study of poverty in the city of Gothenburg, Sweden. Säre [6] analyses how poor families cope with poverty in a Russian small town.

**Social Activity**

The social activity of the population in this study is estimated by structural organized forms of its manifestation. The base and geographically localized form of manifestation of social activity of the population in urban areas is a territorial self-government. Social activity is determined by the system or situational public participation in the formation and work of the organs of territorial public self-government and activities carried out by these authorities. A key objective of the study is to identify factors that contribute to the formation and development of social activity of the urban population. Research tools include several parts: (1) evaluation of public involvement in territorial self-government, the systematic participation and important manifestations of social activity; (2) evaluation of the urban space and the development of its individual elements, as a factor of social activity development (in the questionnaire respondents were proposed to allocate the positive and negative characteristics of places, landscapes, objects of city architecture, significant problem areas of the city, living satisfaction in the city, the
(3) Assessment of material well-being of the population as a factor of development of social activity.

The current reference to the social activity of the population as a development resource not once occurred in Russia and was due to the instability and the search for alternative development scenarios. Ideas of coordination and community participation in management settled in the works of Russian sociologists in XIX-XX centuries. The questions of value and the role of the social activity of the population, especially the political one, are the subject of research in democracy theories [7]. Analysis of nature, forms, orientation of the social activity of the population is not possible without reference to the research in the field of social movements, the analysis of which is presented in the work of [8]. Alexander [9] analyses the cultural trauma and collective identity (we are talking about an aspect of activity i.e. initiative groups of people which constitute the essence of the 5 percent of the active population). Sâtre [10] focuses on women in local politics, who have an important role in local change, and who; among others, cope with poverty and try to solve reasons and consequences of poverty.

Data collection and analysis

The purpose of the research was to analyze the problems of the social space of the city. The area of the research included. A quantitative research approach was used to collect data by means of a household survey in the city districts of Tyumen during September 2015. The choice of the city is proved in our previous papers [11]. Trained fieldworkers, who were familiar with the area, administered the questionnaire to the head of the household in the chosen areas. Sample size amounted to 875 respondents with the confidence level of 95% and a sampling error of 3%. The sampling was random and representational. In order to ensure the representativeness of the study sampling frame was divided by gender, age and territorial basis. Primary data were collected by means of a questionnaire, which comprised various sections including demographics, income and expenditure, perceptions of government service delivery, life satisfaction, skills levels and employment aspects of poor people [12]. Specific questions regarding this article include subjective perceptions regarding poverty. Respondents were asked "Which of the following statements most accurately describes the material well-being of your family?" – the income is not enough even to buy food; the income is enough only to buy food and make mandatory payments; the income is sufficient for the acquisition of the necessary food and clothing, but purchases of durables have to be postponed; buying the majority of durable goods does not cause us difficulties, but a car purchase is not available; the income is enough for everything. Corresponding rank was assigned to assess the poverty level of each response option. Tabulation and data processing were done by computer using SPSS Statistics 22.0 software.

RESULTS AND DISCUSSION

The average value of poverty in Tyumen is 2.09, which generally characterizes the financial status of the population as sufficient for the purchase of food, clothing, making mandatory payments. Large purchases citizens have to postpone or they are not available to them at all. For the analysis of territorial differentiation of poverty in Tyumen 6 historically large areas have been allocated: Central, Lenin, Kalinin, East, Zarechny and the area of cottage building. The data on these 6 large areas was used to the weighted average calculation of the level of population poverty.
Fig. 1. Poverty map of the city of Tyumen

Mapping of the level of material well-being of the population showed that basically two types of zones in the territory can be allocated (as concerning to the weighted average of the city). The first, with lower than city index levels of material well-being (Kalinin, East) and areas with higher than city index levels of financial well-being (Central, Lenin, Zarechny). Local centers of strong differentiation of the level of the material conditions in the city have become cottage building areas - two areas were allocated there: the area to the level of material security of the population which is only enough for food and mandatory payments and the area where the level of the material conditions is the highest in the city, allowing residents to provide themselves not only in everyday household needs, but also to make major purchases.

Fig. 2. Population material well-being in the city of Tyumen

Analysis of population differentiation on the level of material well-being in these areas showed that the majority of citizens living there have the income level which is sufficient for the acquisition of the necessary food and clothing. In most areas the proportion of the population with income, which is only enough to buy food and mandatory payments dominates the proportion of the population, who can afford to buy
the majority of house appliances (refrigerators, TV), but the purchase of the car is not available for them (Central, Kalinin, Lenin, East). The share of the poor (not enough money even to buy food) is small; largely these people live in the Kalinin and East areas, as well as in the old area of Komarov. The amount of rich citizens is especially larger than the poor ones in Zarachov district. The cottage village Pustoshchevo proportion of the population with the highest income is one of the largest in the city.

![Social activity epicenter](image)

**Fig.2. Poverty and social activity map**

Comparative mapping analysis of the results of research income levels and social activity, showed that most of the population activity centers is observed in areas where a very large percentage of the population with average income is present. That middle class is an active part of the urban community, forming the subject position in regards to the management processes and development of the city. Municipal authorities need to develop mechanisms of interaction with them.

**CONCLUSION**

The need to overcome the negative crisis trends requires the officials to respond rapidly and search opportunities to use non-financial resources, maintain social and economic stability, and develop social potential. Social mapping in our research acts as a tool to explore the social activity of the population, to establish the relationship with the factors motivating it including poverty, lines and forms of its manifestation. The applied social mapping method allowed us to identify areas of social tension. Monitoring cartographic studies of the level of material provisions of the citizens and their social activity is very relevant, especially in the crisis. Social activity, as mentioned above, can be constructive and destructive. Local authorities need this information to make timely decisions and joint action with active residents aimed at overcoming the negative trends in the socio-economic development of the territory. The lack of mechanisms for the participatory management of the city in the face of declining living standards can lead to destructive forms of social activity of the citizens, and to aggravate the crisis in the cities. Cartography allowed us to address a variety of different needs ranging from visualization, readability and communication to forecasting.
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