Institutional Problems in Urban Planning and Modern Methods of Reconstruction for Siberian Cities

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Abstract. The work presents institutional problems in Russian urban planning. The institutional structure of the current system for the territories development is discussed. The necessity to conduct research is substantiated and methods and tools for evaluation of the institutional changes effectiveness are suggested. The article suggests the program and tested methods of reconstruction which are to be adopted for Siberia considering climatic, seismic and ecological peculiarities of the regions.

One of the most vital and complicated issues of the modern urban planning is a problem of the cities’ growth, of the reconstruction and modernization of the cities’ environment. In the context of the global social, economic and ecological changes happening in the post-soviet space, first of all, the important role of institutional changes happening in the country, which influence economic, political, social institutions and the urban planning policy in the whole, is attentively studied. Institutional changes are considered as changes of legal norms and relations of their correlations, and as changes of organizational structures and space of their interaction, such as associations, or as changes in a common way of thinking. In our work, institutions can be considered as a set of rules and customs, norms, political and economic rules of behaviour of society, which are stated in the legislation, decisions and instructions. Alternatively, institutions are the established and developed in the country and in the region, mechanisms for coordination of the political and economic processes, such as, for example, elections and/or markets. Modern economic science defines "institutions" as “a steady complex of mutual roles and relationships, and behavioural features of social and economic agents.” These are the “rules of the game”, which are formal (laws, contracts, deals, organizational and legislative structures) and informal (rules of behaviour, customs, ethic and ideological norms) [1].

The most important in the context of the ongoing reforms are the formal institutions, which, first of all, establish the main rules of the business activities. These rules determine the effectiveness of the whole economic system functioning and serve as a basis for the solution of the urban planning issues. Therefore, the role of system and local-organizational institutions have to be distinguished.

To provide background for our discussion, we present a typology of institutions depending on their functional role in an economy [2,3]. Such a classification includes two types of institutions: system (or external) and locally-organizational (internal).
System institutions are institutions determining a type of an economic order, i.e. dominating type of an economic system. These institutions establish key rules of economic activities; therefore they include not only purely economic rules and norms, but political and ethical norms also, which are required for the effective functioning of an economic system. An example of system institutions are institutions specifying and protecting property rights, making economic decisions, and changing the norms of economic ethics, etc.[4] The system forming institutions may include all varieties of institutions arising during development of market economy and providing an opportunity for functioning of institutions of the upper order, such as banks, financial system, etc.[5-10]

Institutions that structure interactions, including transactions in the open market and those within organizational structures are called locally-organizational. These include such institutions as share and commodity exchanges, banks and financial firms. They not only make transactions among various economic entities possible, but to some degree reduce uncertainty and risk and reduce transaction costs.

These two basic types of institutions support the two primary keys to successful market economics: private property and freedom to make contracts.[5] The process of formalizing and standardizing these fundamental economic activities is called institutionalization.

The institutional structure in the sphere of Urban planning has a number of components: 1) property rights (the legal basis to use property at one’s own discretion); 2) investment institutions (banks, insurance companies, funds, etc.); 3) legislature (laws, decisions, decrees); 4) organizational structure of the urban planning and of specific enterprises; 5) informational and professional support (i.e., the provision of information about activities and prospects for development within the industry; 6) legal institutions that provide the development, implementation and enforcement of legal documents; 7) institutions providing professional training and education to the industry; and 8) informal institutions that facilitate cooperation and establish the norms of behaviour.

Jack Knight [8] thinks that “institutions are the set of rules, structuring public mutual relations in a specific way, the knowledge of which should be known to all members of a certain community.” Institutions include formal rules and informal restrictions, such as the conventional norms of behaviour, the agreements made, internal restrictions of activity, and the certain characteristics of compulsion to perform these and/or the others. Formal institutions are often created to serve interests of those who control institutional changes in the market economy. Social and economic institutions arise when individual habits are adopted by a society and/or by a group. Institutionalists define institutions not in the narrow sense of the formal organizations, but in a wider context of socially predetermined behaviour as “the widespread and constant way of thinking or acting, which is implanted in habits of a group or in customs of the people.”[9] Institutions can be considered to be public capital, which can vary by depreciation and new investments.

The term “institutional agreement” refers to a certain set of behavioral rules, which manage the behavior under the concrete conditions in a specific field of activity. “Institutional structure”, as defined by D. North [6], is the whole set of “institutional agreements” in an economy, including organizations, legislation, customs and ideology. In this paper we focus on “institutional change,” which can affect specific institutions, institutional agreements or institutional structure.

Institutional structure determines the economic structure of a region and it particularly affects the efficiency of the Forest branch. The degree of institutional system development, its flexibility and ability to react to evolutionary changes considerably determines the development of an economy. In the Forest branch, it can create favorable conditions for the formation of new enterprises. This structure can be relatively static or dynamic, depending on specific historic-political conditions. Institutional structure is often determined by the comparative efficiency among alternative ways of coordinating economic activities at the time of institutional structure formation. Therefore, institutional changes should be analyzed within the framework of the whole institutional structure, considering issues of property, investments, cultural norms, legislation, the management of the Forest industry, professional and information support and other institutions.
In a market economy, institutions evolve as the result of a metacompetition, i.e. competition among institutions. In this competition, institutions are selected depending on their ability to cover the greatest number of interactions at the lowest cost. A set of interacting economic institutional entities, which make economic decisions under institutional conditions, is an economic system. Various economic systems differ not by kinds of economic activities nor economic processes (e.g., production, consumption, investment), but by the character of their economic institutions and their impact on economic decision-making. [7]

There are three ways that institutions are controlled: formal rules, informal restrictions and enforcement of these rules and restrictions [1]. Reform of institutions is a complex process, requiring significant investments of money, intellect and time. Although rapid institutional transformations may be possible through political and/or legal decisions, in practice such changes are slow, especially in the Russian environment. The informal restrictions related to customs, traditions and codes of behavior are extremely powerful in Russian society, and they are very resistant to conscious reform. The primary agent of institutional change is an entrepreneur, either political or economic. This recognition was not common historically, with the understanding of institutions based more on a “rules of the game” concept than on the players.

The major document determining the norms of urban planning and regulating the interaction of the stakeholders in the country is Urban Planning Code of the Russian Federation (UPC RF), the last edition of which has been ratified on December 29, 2004. The major task of the UPC is to guarantee the following of the legal rights of builders and to protect interests of the local community in the field of planning and building in the territory.

The necessary requirements for urban planning and reconstruction activities are included into the Building Norms and Rules (BNRs). The other normative documents, which regulate urban planning and protect citizens’ rights include federal level documents, and documents of the regional and of the municipal levels. Urban planning for each large city is usually conducted through the development and periodic actualization of the documents about urban planning for the development of the territories. The planning of volumes, pace and turn of activities for capital repairing, modernization, reconstruction, and renovation of buildings and structures of the present cities’ structures can be conducted as well, based on the Territorial scheme of the scheduled developments and implementation of the cities programs for the complex reconstruction, which is to be conducted with the consideration of the General plan. The General plan of the Urban planning development of the large cities is of long-run character.

It is worth to mention that urban planning and architecture are considered as different directions in the legislature. Urban planning is public and administrative. Architecture is a private right of individuals and/or organizations and refers to the service industry [11].

Back in 1996 Russian Government has adopted the program “Housing: Reconstruction of the Dwelling Blocks of the First Mass Series”. Few experiments have been realized in cities of Sankt-Petersburg, Moscow, of Moscow region and in few other cities of the Western Russia. In July, 2007, the Federal Law of the Russian Federation № 185-FZ “About a Fund to Assist the Reforming of the Municipal Housing Economy” was ratified.

Urban planning is realized in each large city via development and periodic actualization of the related documents about town planning, the whole city areas and particular special status units, as well as, systems of the city infrastructure and urban complexes development [12].

To solve the problem of reconstruction of Siberian cities, we propose to implement a complex of measures presented in the program, which includes three consecutive stages. The urban planning problems of reconstruction solved in the suggested program are related to the preservation of the buildings, which have historic and architectural value, to the increase of the density of the housing fund through involvement of free lots for the construction, to the satisfaction of hygienic requirements of buildings (including insolation and aeration regimes, levels of air pollution and of noise), optimization of the content and of the capacity of the social, engineering and transport infrastructure. The stages of this program are:
1. Reconstruction and modernization of old and of ramshackle buildings and structures. The priority solution is to implement the reconstruction of the typical dwelling houses. As a result of inspections, a significant depreciation of roofing and balconies, of engineering equipment, low heat insulation of the walls, and other problems are identified. The modernization of structures to clear the physical depreciation assumes: strengthening or replacement of different constructive elements, starting from the basement and finishing with the roof; making cold proofing of the external surrounding structures; replacement of windows and of balcony doors; strengthening of the console elements of buildings. To overcome moral depreciation, the methods to improve architectural image of a building are implemented, as well as, changes in its planning structure. The most acceptable methods of reconstruction of houses satisfactory for further living, which have been tested in Moscow, in Sankt-Petersburg, and in some cities in Germany, are: build-ups for buildings or mansards construction; additions (to butts and to facades); restoration of facades and wall painting. Herewith, the construction activities while reconstructing, for example, a typical living house can include cold proofing and water proofing improvement of the ground floor; improvement of the cold proof characteristics of the whole building through glazing and warming of the balconies, installation of hanging stanzas, replacement of transparent structures, cold proofing of butt walls, utilities modernization, application of a modern system of energy resources consumption and accounting, installation of autonomous boilers if required; usage of renewable sources of energy to decrease the consumption of fuel-energy resources, to minimize ecologic load related to fuel-energy usage, to provide decentralized consumers in districts with distant fuel provision with the heat energy, to decrease the expenses for distant provision of fuels.

2. Complex per section of the city reconstruction. The necessity of the complex reconstruction of the formed city’s districts is stipulated by a number of social, urban planning and economic factors. Due to the moral and physical depreciation of the existing living houses build during the industrialization period, there is a need for improvement of architectural and planning, and constructive state of houses. There is a need to develop special projects of the whole blocks and districts rebuilding, the projects of the complex demolition, reconstruction, repairing, restoration, recovery, and of new building construction, etc. The complex approach to the reconstruction of the blocks includes not only the modernization of living houses but the urban land improvement as well, which intends green landscaping, fountains and flower beds arrangement, recreation places, reconstruction of play and sports gardens, construction of small architectural forms.

3. Construction of mega clusters. This is large building-complexes construction, which include into themselves the whole set of all social compounds of the city structure, required and sufficient for the proper autonomous functioning of a section or a micro district, district or a larger formation. The given mega cluster approach, suggested for the solution of the task of the complex reconstruction of sections of the existing housing development, does fully respond to the aims and tasks of the program for creation of the comfortable living environment in a megalopolis. This is a way to solve the problems, which are for many years stumbling blocks to start a large scale implementation of reconstruction activities for the outdated living facilities in large cities.

To start the program suggested and to implement the most acceptable methods of reconstruction, there is a need for their adaptation for a specific Siberian region, where the reconstruction activities are to be held, considering climatic, seismic, and ecological peculiarities of a territory selected. There is a need for a specific set of institutional innovations [2] but in the Sphere of Urban Planning.

There are at least three institutional ‘measures’ in the context of the sustainable development of territories. These are formal rules, informal limitations, and effective provision of these rules and limitations. The creation of the favorable habitat is based on the development of a favorable norms and legislature basis. Therefore, there is a need to improve institutional structure, which is still complicate and embarrassed in Russia and in the regions. The economic reforms and new principles of the State management have resulted in abolishment of the old system of urban planning and housing development. The complicated city problems, which include determination of the order of priority of development and reconstruction of the city’s territories according to social, ecological and economic
tasks and criteria, the necessity to coordinate the ongoing and implementation of prospective programs for development of branches of the city’s economy, of its infrastructure, future plans of development of administrative counties, districts and other territorial entities, can be effectively solved only within a framework of a united system of planning of the city’s development. The major materials and results of institutional researches of the authors have been published, reported and discussed in international, whole-Russia, and regional scientific and practical conferences and workshops devoted to the problems of economic, social and institutional development, as well as, for the support and development of the regional economics.

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