Study of Elements of System Analysis in Relation to the Development of the Territories of Megacities

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SUMMARY

For any large territory, optimal and comprehensive development of the territories is important. All possible directions of such development should be taken into account: economic, social, demographic, transport, ecology, residential and selective zones and much more. All these directions (subsystems) are mutually connected and in the development of one of the subsystems, it is necessary not to forget about others. Thus, for the integrated development of the Territories, it is necessary to create a multi-purpose function that would lead to the optimal development of all subsystems. This is the purpose of the System Analysis. But, unfortunately, this analysis was hardly used for the development of the territories.

The development of territories is understood to be the transformation of socio-economic conditions of life, ecology and other components in a certain direction. This direction is determined by the target system. The main, integral target and target for each subsystem are distinguished.

For example, the main, integral goal of socio-economic development of the Territories is to improve the quality of life of the population. This means raising real incomes (which makes it necessary to develop production and related employment of the population), improving the social infrastructure of cities and settlements aimed at increasing the opportunities of people to receive medical care, to be able to live comfortably, to learn throughout their lives, to be able to engage in sports, rest for their interests, and to develop transport accessibility.

Sub-goals are set for each of the above subsystems. Thus, from the point of view of system analysis, a multidimensional goal appears. However, since the subsystems are interconnected, it is not possible to fully achieve such a multidimensional goal. Therefore, it is necessary to identify the most important goals and to prioritize them. Understand which sub-goals can be implemented not
completely, but partially. And to what extent partially. Thus, a task does not appear with a multidimensional target, but with some function from a multidimensional target.

And this function should lead to the most optimal and effective result of the Territory’s development. It should be borne in mind that the modern interpretation of the development of the Territories indicates the need for harmonious and sustainable development of the Territories.

This report shows examples of the use of Systems Analysis for optimal and efficient development of territories.

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