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### THE ROLE OF ENGINEERING ECONOMICS ANALYZES IN PARTICIPATORY MOTIVATION PRIVATE FOR REALIZATION OURBAN DEVELOPMENT PLANS

This article discusses the meaning and subject of role of engineering economics analyzes in participatory motivation. Private for realization of urban development plans.

Keywords: Urban Development Plans, Feasibility, Economic Evaluation, Engineering Economics, Private Sector Motivation.

Abstract: One of the reasons for the failure of urban development plans is the discussion of funding and how these resources are provided by urban management.

This requires, to a certain extent, the participation of the people in implementing urban development plans. In the present study, the efficiency of the analyzes.

The economics of engineering in the economic planning of projects has been examined as an incentive tool for private sector participation.

On the one hand, urban development is aimed at ensuring the growth of population welfare. On the other hand, it must maintain the ecological balance and preserve the historical and cultural memory of the territory. Urban activity is driven by motivation. Motivation is recorded in royal structures called urban landscapes. Motivation can be in conflict with each other, the main differences are as follows:

- 1. Economy and environment;
- 2. Social and private;
- 3. Aesthetics and information;
- 4. Material and spiritual.

This conflict stems from the contradictions surrounding the landscape and its spatial design. The basis of sustainable development is perspective. The base of the landscape is the surface of the crust and soothes the surface of the earth. Landscape features depend on the relief method as follows. The ecological value of a landscape depends on its biological productivity and increases from top to bottom. In contrast, environmental sustainability increases from plain to higher. As a result, the following sustainable development criteria can be developed for urban planning.

1. In urban activities, all motivations must be realized. If supply coincides with the incentives at a given point in time, we call this development sustainable.

2. Factors of urban intensity. Early prospects must be consistent with their values and sustainability.

3. Historical and cultural landscapes must retain their uniqueness, originality and honesty. State of the art inductive research attempts to test the efficiency of economic engineering analysis and to guide one of the project proposals. The assumption of financial justification indicates, it has financial viability and during the research, the test. Lack of economic planning, the proposed project lacks financial justification.

## **1. Introduction**

Investment and realization, economic design of the activity is based on urban considerations. Finally suggestions on the system of preparation and implementation of urban development plans in order to economize the projects and increase the motivation of the private sector and the feasibility of the plans is presented [1]. Real estate development is driven by particular interest. Urban planning in urban areas faces many conflicts. The Russian Town Planning Code government distinguishes between public and private interests by changing the territory. According to this code, sustainable development is the main goal of urban planning. The problem of sustainable development in urban planning is as follows. On the one hand, urban development of the territory should ensure the growth of well-being of the population. On the other hand, the ecological balance should ensure biological and cultural diversity and preserve the historical and cultural «memory» of the territory. This condition necessitates the development of the theory and methodology of urban development, which can lead to sustainable development of the territory.

# 2. Town Program Motivations

One of the needs and assessments of government is urban development, society and citizens. An assessment of needs and values can be presented as another.

- 1. Health;
- 2. Wealth;
- 3. Society;
- 4. Beauty;
- 5. Personalization;
- 6. Information;
- 7. Technical specifications.

Providing hygienic conditions for a metabolism between the human being and his environment, and provides an environment meeting nature protection criteria means motivation health. According to this motivation, natural laws of landscaping such as an ecological value and ecological stability are used as criteria to estimate land use effectiveness [1].

Incentives for wealth mean maximizing profits for urban development investors. Given this motivation, the general criterion for assessing land use efficiency is the minimum time required to overcome the distance. This applies both to the efficiency of the region, and to maximum profit at minimum cost [2].

A motivational society means creating conditions for a homogeneous and integrated society, a common cultural idea that exists in the public mind when members of a society offer common ideas of public interest. Given this motivation, the criteria for the effectiveness of the Territorial organization are as follows: The possibility of public control over the criteria for the behavior of community members when using and developing land. Effective exchange of activities, cooperation and mutual assistance.

Motivational beauty means creating a beautiful harmonious environment. In the case of the city, the idea of beauty embodies many elements that are chronic and different from a heterogeneous city. In accordance with this motivation, the criteria for the effectiveness of land organization are given to the uniqueness, diversity and integrity of the image of urban space [3].

Motivation based on leadership, honesty and integrity. This was done during the expulsion of the members. In this case, everyone has their own rights to personal privacy and personal life. According to these motivations, the criteria for the effectiveness of earthworms are: the possibility of separating the element from the element, the partial association of the painful soft units, the various forms of formation and centrifugal process.

Motivational information based on transcendental chaos in meaning, activities and surroundings. He also posted information about the threat. Criterion Effectiveness Territorial organizations are optimally diversified, and what they indicate is that the diversity of the element is not necessarily due to the ability to accommodate the ego in the population, more precisely.

Motivational spirituality is embedded in contemporary historical and cultural heritage, and is therefore associated with self-sufficiently resourceful societies. According to these motivations, the criterion for territorial organizations is to have an effective supportive and fulfilling legacy in order to develop spiritual and cultural memories and integrations of spiritual and spiritual heritage.

# Urban landscape models of urban incentives

Urban incentives are embedded in urban landscape models. Cityscape is a special kind of anthropological perspective. This is the result of the influence of urban development on the nature of the territory. City landscape consists of three elements: built-up area, sidewalk and green area. The density of the built-up area, the ratio of external and internal space, as well as how the external space is divided into green spaces and asphalt pavement – all this is not arbitrary. These characteristics depend on the state of urban development, as well as on the functional purpose and motivation of urban development of the territory.

The share of each element (building, sidewalk and green spaces) throughout the territory is considered as a classification index. For example, if the proportion of elements is the same, we have a landscape with green spaces or, as we can write, a model of the urban landscape - the "palace and park complex". If the building area is larger than the paving area and the green zone, such is the urban landscape for dense blocks of ordinary housing. If the sidewalk plays a major role in a space agency, it is usually intended for blocks of a community center or large public institutions with crowded areas. If the site is dominated by green spaces, this urban landscape is often found in urban

parks and gardens. These basic elements form an urban network. In addition to their small reserves, the spatial design of the network plays an important role. If the built-in zone is organized into a compact contour, and the green space is formed as another compact contour, the landscape drawing of the city can be called polar or contrast. If the built-in territory, sidewalk and green zone are mixed together in the form of several small elements, the landscape drawing of the city can be called mosaic.

The motives of urban planning as follows affect the landscape of cities. In most of the built-up area, material incentives predominate, since investment in a building is more profitable than investing in two other elements [4].

If the landscape is mostly paved, it shows that the motivation of society to direct social activities, including public spaces, is essential for culture, trade and administrative functions. The green landscape on the city network shows that recreational and environmentally friendly practices are the driving force behind health.

The relationship between urban planning incentives and urban landscape structure can be reflected in the following scheme. First, specific human needs are generalized to a specific group called «motivation». Second, there is a land with human and natural landscapes. Third, organizational planning tools are defined as a motivational field such as culture, market, environmental monitoring, and so on. Fifth, the main criteria for estimating the effectiveness of motivation must be determined. Sixth, the main criteria for the effectiveness of the territory organization should be defined according to the motivation. As a result, we have a territory structure that is considered a model of urban landscape.

Every motivation is realized in the desire to change the realm. Motivation for health means the right conditions for metabolism between man and nature, that is, maintaining the ecological balance and n. For this purpose, a continuous network of natural domains of territory ranging from local to regional and global is not considered. Motivation of wealth means investing in existing centers and commercial objects as well as easy access to time and space. Society The motivation to realize land cells in territorial groups The motivation for beauty is achieved through an urban composition that, with the uniqueness of location, the variety of elements of personalization motivation in the desire to separate and differentiate cells is usually achieved in defecation processes. Motivation for information is based on the need to save information. That is why the simple, recognizable elements and the ordered connections between them are based on this motivation. Motivation for spirituality is realized through the protection of historical, cultural and architectural monuments, as well as historical landscapes of destruction and distortion by modern buildings.

### Motivation for conflict and their solutions

The contradictions of the sustainable development of the territory, a couple of contradictions and their solution are the prospects for the development of the city. The conflict between the economy and the environment is associated with conflicting requirements, on the one hand, to the main effective urban structure, on the other to the

main urban functional structure, and on the other to the functions of nature conservation and the main ecological structure.

The ecological structure occupying the valley and flood plain is a solution to the conflict in polar coexistence (isolated) from both types. City functional structure, which occupies high river terraces and reservoirs.

Public and private conflict suggests conflicting trends in the formation of a network of housing landscape cells. Social motivation is realized in the expansion and consolidation of cells and in their centralized organization. Private incentives are realized in the disorder, disconnection and collapse of the network. The solution to the conflict lies in the structure of flexible infrastructure. On the one hand, these substrates organize isolated cells. On the other hand, low-cost aircraft are equipped with a single complex system. A multi-level hierarchy of landscape axes, such as wings and watersheds, is the basis of spatial design.

The conflict of information and aesthetics includes the opposite attitude of motives to the diversity of elements and the rigor of the network order for the organization of the territory. The solution to the conflict is to combine beautiful urban fabrics with conventional frames. This is the optimal principle of diversity.

Table 1. Contradictions of sustainable development and principles of their solution		
Type conflict of	Contradictions concerning:	Principle of conflict solution
Economy vs. Ecol-	Valley landscape as a natural territory	Use of landscapes according
ogy	frame.	to their ecological value and stability
Social Private vs.	Homogeneity, openness and density	Diversification of the elements while
	of the city network cells; role of the	keeping the integrity of the whole net-
	centers; social value land use.	work through the development of the
		centers And sub centers system.
Aesthetics vs.	Variety, uniqueness and	Optimum variety;
Information	discreteness of the network. city	Keeping the uniqueness while maintain-
		ing the system's order
Material vs. Spiritual	Historical and cultural heritage monu-	Keeping the authenticity and integrity of
	ments	the heritage while
		Modernizing the life-support system.

Table 1. Contradictions of sustainable development and principles of their solution

Material and spiritual conflict includes attitudes contrary to cultural heritage, including architectural works and historical landscapes. The laws of capital growth require acceleration of the turnover of capital, including buildings and structures. Capital growth also requires technological advances, including transport and traffic intensification. This contradicts the task of maintaining the structure and scale of historical models of the historical landscape.

The solution to this conflict is to invest in the restoration of buildings, the preservation of protected areas, the integration of modern buildings in historic protected areas and the modernization of engineering structures.

Reducing collisions with a contradictory attitude to the spatial design of the urban landscape and its elements leads to the following table (see Table 1). Thus, the sustainable development of the territory, the organization of the territory using urban landscapes and land use rules is an opportunity to resolve conflicts of motivation for urban development in relation to social welfare, biodiversity and environmental balance, as well as historical conservation and cultural heritage for the current population and for future generations.

## The role of primitive landscapes in the sustainable development of the territory

Relief plays a leading role in the landscape design of the earth's surface.

Independently of the size, the relief consists of three elements: the top, the slope, the lowland. According to the elemental landscape geochemistry theory created by B.B. Polynov, the elements are characterized by three ecological regimes: alluvial (wash out), diluvia (wash away), and accumulative including alluvial (deposit). Hence it follows that the differentiation of the landscapes by their ecological value and stability depends on the landscape material movement on the relief elements. The ecological value (capability of the landscape to produce the air oxygen, water, soil and other natural environment components) increases together with the biological productiveness which depends on the height location of the relief. By the ecological stability we mean the resistance of the landscape to the anthropogenic loads such as pollution and the building load. The general natural law is that the ecological value increases from the low-land to the top. It is because the landscape's self-cleaning capacity on the top is higher than in the lowland.

An analysis of urban landscapes using terrain features is provided below.

1. Past experience and modern practice in urban planning there are many examples of increasing urban development in the upper part of the channel and watersheds with excellent quality of practical, combined and environmental solutions. At the same time, the valley and floodplain have been preserved as a natural and recreational site.

2. The form and intensity of urban development of the desired areas should be limited in order to create slope stability. Due to the high geological dynamics of the slopes and the discomfort during construction along the slope, it is not significant. This slope has good potential for discovering the city in harmony with nature. When the proportion of built-up area is greater than the external area, too compact, the slope may lose its visual and environmental ability.

3. Decision-makers should be very responsible for determining the location of cities in floodplains of ground water.

4. The tendency in the city waterfront districts transformation is that industrial enterprises and transit traffic are moved beyond the waterfront and instead of them, public and recreational complexes and waterfronts are created. In accordance with the distribution of the ecological value and ecological resistance of elemental landscapes, the relief elements should be used in the following way. The flat watersheds within the territory of the real urban development should be used for most intensive building [5]. The valleys and flood plains should be used as a protected natural and recreational property. Because of the big erosion process energy and high exposition value, the slope landscape should be used for limited urbanization combining open green space built-up areas.

#### Derivation of criteria for sustainable territorial development

As a result, the following criteria can be developed for sustainable development of the territory.

1. All of the above motives should be implemented in urban planning. If in this region at the moment stimulating actions are equally motivated, such development is considered sustainable.

2. The ratio of the intensity of urbanization of the original landscape should correspond to the height of the landscape relief. Flat watersheds should be used for intensive urbanization. View of the valley should be used for recreation and nature conservation. The slope should be used for limited urbanization.

3. During the period of revival, reconstruction and revival of historical and cultural landscapes, he must maintain his uniqueness, originality and honesty.

The fact is that material interests do not meet the goals of preserving the natural and cultural heritage. To explain the causes of the conflict between the motives and effects of urban development on the landscape, it is necessary to develop an appropriate theoretical model. It is also necessary to create a methodology for urban planning, which will allow resolving disputes and ensuring sustainable development of the territory.

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В данной статье рассматривается значение и субъект роли анализа инженерной экономики в мотивации участия частных лиц для реализации планов городского развития.

**Ключевые слова:** планы городского развития, осуществимость, экономическая оценка, инженерная экономика, мотивация частного сектора.

Бұл мақалада қалалық даму жоспарларын іске асыру үшін жеке тұлғалардың қатысуын уәждеуде инженерлік экономиканы талдаудың маңызы мен мәні қарастырылады.

*Түйін сөздер:* қаланың даму жоспарлары, іске асырылуы, экономикалық бағасы, инженерлік экономика, жеке сектордың уәждемесі.