Research Article

# SURVEY THE REGULATORY EFFECT OF URBAN LAND USE IN ENVIRONMENTAL PROTECTION AND SUSTAINABLE DEVELOPMENT

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#### **ABSTRACT**

Earth is where all human activities on it is the source material for this work, it seems that the impact of environmental issues in the short or long term serious threat to the global environment. Short term food security, human vulnerability, health and safety, and the long-term viability of the earth model and the urban environment are at risk. The regulation of land use and sustainable development approach can guarantee the conservation of habitats that are endangered. We have written a collection of library resources and relies on analytic applications; which first introduced the concept of sustainable development and urban lands will pay, the basic definitions and interpretations of the term properly organized, in urban use, and at the end of the guidelines will find the how to achieve environmental sustainability in urban communities.

Keywords: City, Environment, Land Use, Organization, Sustainable Development

# INTRODUCTION

Land use planning and organizing a complex and controversial process that is influenced by pressure groups and has great instructions, this plan can be broad policy issues, ranging from the preservation of agricultural land located in the main street of their trash (Dehghan, 2003) the domestic laws and regulations in the field of training for a title has been raised and in order to improve the status quo in order to improve living conditions in urban and rural zones (Dizani *et al.*, 2010) and the concept of sustainability is a principle rooted in ecologically based on this principle if the natural environment can be in any of the processing environment, the size of the operation or efficiency to be carried out, the principle of general capital remains stable, and our use of the environment to be productive, it is always stable, sustainable development planners in making decisions on major urban settlements (Safarabadi *et al.*, 2013) and for the entire human society is undeniable necessity, but urban communities, according to the circumstances, have priority because the development process in general and particularly in urban areas of developing countries it is widely assumed, so that these countries 'share in the 1960 metropolis in the world, 9 of 19 urban area has been.

While this number in the 2000 to the mother city of Metropolis 66 to 50 is reached. This extension has caused a lot of planning and urban areas and their inhabitants do not meet many problems with many constraints because of the spread of physical, Savareh move domination, separation workplace the housing, place of work and leisure separation leisure, away from nature, loss of open spaces and identities, they encountered (Saberi, 2007) in these cities are far from sustainable city. Generally, cities are major consumers of natural resources and pollution are major producers and distributors, so are the social and environmental crisis. So it seems to solve this problem and increase the level of satisfaction of the inhabitants of the cities, especially cities, depends on an ability to regulate land use, urban planning in order to develop which not only enhance the efficiency of the present, but also take steps to align the interests of future generations.

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#### History of Literature

In a survey by the issue of upgrading and modernization done by Nick Nia and Davoodpur and urban decay strategy towards achieving the physical dimensions of sustainable urban development has taken place in 2011, improvement and modernization of urban sustainable development with a view is analyzed the data. The study of natural systems such as wind, currents, wind, flowing water, sunlight, precipitation and absorption of the principles that are considered to achieve the most benefit. The method used in this study is descriptive and documentary data and field data in two ways (questionnaires, interviews, observation) is collected (Davoodpur *et al.*, 2011).

In a paper Kavaliauskas with the concept of sustainable regional development, land use planning and organizing the experience of Lithuania in 2008 has been the concept of sustainable development as a key word for Regional Planning stated. The structure of this paper include the identification of problem areas and to establish a framework of integrated spatial position is a priority function, this paper deals with sustainable land use systems and regional policy by providing constructive scenarios, conservative, moderate and organized has raised (Kavaliauskas, 2008).

#### MATERIALS AND METHODS

**Theoretical Foundations** 

Table 1: Types of urban land use (PourMohammadi, 2012)

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Land use Type	Guide

- 1- Residential Low density
- Medium density
- High density
- Specific density
- 2- Commercial Commercial center of the city
- Neighborhood Business Center
- Non-permanent markets
- 3-Education Kindergarten
- Elementary School
- Teenager School
- High school
- 4- Professional and High Education Vocational training centers, school, etc.
- Universities and centers of higher education
- 5- Religious
- 6- Cultural
- 7- Tourism and hospitality
- 8- Therapeutic
- 9- Sanitary
- 10- Athletic
- 11- Administrative
- 12-Green Space Public green space
- Green space for children to play
- Green space conservation
- Private gardens and green spaces
- Farms and plantations
- 13- Military zones
- 14- Industry
- 15- Urban infrastructure
- 16- Transport and storage
- 17- Cemetery

Environment: environment, to which all the human environment directly and indirectly related to it, and its life and activities associated with it (Firuzi, 2005), provide a formal report of the research done in this area suggests that environmental changes related to the objectives pursued by groups that are under the influence (Zavadskas *et al.*, 2005).

Land Use: How to use the land. Somehow related to comprehensive land use plans, detailed and conductor finds meaning and function. Land use spatial aspects of all human activities on the earth show its material and spiritual needs (Barabadi, 2004). Hence, the land is shaped by two powerful components: the first human needs and ecological characteristics and processes. None of the above factors do not remain constant, But in proportion to changes in lifestyle, change their nature. Changes in land use patterns, the space at different levels and in different time periods occur, indicating constant interaction and conflict between human and environmental needs of the planet (Rafiean, 2010) to determine land use based on basic research to understand and be familiar with the city and urban sprawl based activities (Barabadi, 2004).

Types of land use: Various uses of land that is allocated in each city is different. The land uses in the city, is usually classified according to Table 1.

Control land use: land use control, usually through zoning, separation of land, building permits and land taxes is done (Ziyari, 2009) specially governments by municipals, directly or indirectly, in the land of the city are involved, because in most cases, landlords take advantage of the public's interests are in conflict. Basically three types of government intervention in land use in different countries can be seen:

- A- Right of ownership of land without government interference; in the politics of land owners to whatever suited them decide on their own land.
- B- Government intervention to determine the type and quality of the land use and land for specific purposes to be considered: In the policy that most Western Governments to act where, in most cases of conversion of agricultural land for house-building and urban installations can be prevented.
- C- The land directly to become the property of government and make decisions regarding land use, are the main factors (Barabadi, 2004).

Accounting: Accounting practice preparation or organization and is sort of a place. The literature generally organized urban interventions can be considered equivalent regularization term, while the term organization is interpreted to organization. This term as organizing is a combination of two words of the organization. The word organization means the institution, organization, system, and program specific individual or group of individuals can be interpreted. Organized the two words shown that the semantic range of the word order is much broader than the term of the organization. In other words, the range of meanings of words organizing includes the regularization term. In legal literature, legislation and regulations organizing the different meanings of the term has been interpreted: Regulatory pathways and public spaces, organizing urban infrastructure, regulation and restoration of historic buildings and texture, urban landscape organizing, organizing physical, functional organization, organizing urban infrastructure and... (Dezaini and Associates, 2010).

Table 2: Organizing the words, Source: Dezaini and Associates, 2010

<b>Native Literature</b>	Non-Aboriginal	l literature		
Persian	Italian	France	English	Language
سامان دهی	Organizzazione	Amenagement	Organization	Word
Ordering, organize	organize	Sort of a thing or	Bring order,	The meaning of
		local practice	discipline to a system	the word
ساز ماندهی،بهبود	Sistemazione	Organisation Arrangement	Improvement Arrangment	Word aligned

Indicator: indicators are one of an essential component for an overall assessment of progress towards sustainable development. Some specific definitions of the indicators that have been proposed in various

references as follows: A variable is a variable representing the other one that is measurable and it's not commentary, criteria for reviewing information related to a particular phenomenon or a stand-alone indicator for measuring the phenomenon (Mohammad, 2005).

Regulation of land use indicators: quantitative indicators: The evaluation is based on per capita compared with the use of existing standards or the current and future needs of the study area in the space provided.

Quality Index: The qualitative characteristics are determined and compared to each other based on the following four matrices to be checked:

Compatibility Matrix: The matrix in a region of the user that they should stop bothering and they work together.

Compliance matrix: this matrix compatibility between the user and you want to evaluate it for seating and on this basis we can say that every user according to its specific features for a specific location is appropriate, and each has its own local user also requires.

Capacity matrix: each activity (the user) is an urban scale, as the structure of the body has different levels and as the two aforementioned scale with each other is a good performance each and every user will have a level of urban structure is also an effective way to benefit from the services, activities and will not be a problem if several matches for both the phenomenon will bring.

Dependency matrix: Sometimes the activity of a user is depending on the activity or activities of other users, so in this matrix dependence and the need for proximity to other land uses are checked (Pour Mohammadi, 2012).

City: City is an area with municipal services such as garbage collection, fire, police, and so provides (Darkush, 2011).

Sustainable development: Sustainable development effort to create a balance between environmental quality, social and economic present and future (Shafiei *et al.*, 2013) and is based on the basic needs of all human beings. But along with the acceptance of the concept of ecological standards for use in the power range that everyone can aspire to be defined (Zakerhaqiqy, 2010) has developed a human-centered sustainable development (Chehrazad, 2012).

Sustainability indicators: indicators of sustainable development should be the dimensions of sustainable development. These include: 1. Indicators of institutional 2. Environmental indicators 3. Social indicators 4. Economic indicators the following tables detail each of the indicators listed above. The main use of indicators to support sustainable development and modification of policies and decisions at various levels. Sustainable development and use of indicators of social features, geographical, cultural, and global and local scale are very different. As long as the index is not intended to be exact, their implementation is not possible (Mohammadi and Rostami, 2012).

Table 3: Sustainability indicators: Indicators Institutional, Source: Enaiati, 2008

Axes	The sub-sections	Indicators
Institutional framework	- Implementation of sustainable development strategy	- National Strategy for Sustainable Development
	- International cooperation	- Implementation of the agreements approved
Institutional capacity	<ul> <li>Access to information</li> <li>Communication infrastructure</li> <li>Science and Technology</li> <li>Readiness for disaster response</li> </ul>	The number of Internet subscribers per 1,000 people  The number of telephone lines per 1,000 people  Research and development expenses as a percentage of GDP  The human and economic losses due to natural disasters

Table 4: Sustainability indicators: indicators of environmental Source: Enaiati (2008)

Axes	The sul	b-sections	Indica	ators
Atmosphere	-	Climate Change	-	Emissions of greenhouse gases
	-	The destruction	n -	Consumption of materials damaging the ozone layer
	of the o	zone layer	-	The concentration of air pollutants in urban areas
	-	Air Quality		
Ground	-	Agriculture	-	The area of arable land is cultivated and cultivable
	-	Forest	-	The use of chemical fertilizers
	-	Desertification	-	The use of agricultural pesticide
	-	Urbanization	-	The area of forest to agricultural land
			-	The wood harvested from forest
			-	The amount of land that are at risk of desertification
			-	Formal and informal urban residential area of logic
			and ma	arginal
Oceans, seas	-	Coastal areas	-	The amount of algae in coastal waters
and coasts	-	Fishery	-	Percent of the population living in coastal areas
			-	Annual catch of species important fish
Freshwater	-	The Quality of	-	The extent of groundwater and surface water annually
	Water		availal	ple is used
			-	The BOD in water
			-	The total amount of bacilli (Ecoli) in water
Biodiversity	-	Ecosystem	-	Percent of the total area of protected areas
	-	Species	-	Abundance of particular and important species

Table 5: Sustainability indicators : economic indicators, Source: Enaiati (2008)

Axes		The	sub-sections		Indica	ators
Economic	-	Eco	onomic performan	nce	-	GDP per capita
structure	-	Bus	siness		-	GDP per unit of capital
	-	Fin	ancial status		-	The share of investment in GDP
					-	Obviously getting to GNP
				- percen	The total amount taken or received ODA as a tage of GNP	
Production	and	-	Substance		-	The increased use of material
consumption patterns	-	Energy Use		-	Annual energy consumption per unit of capital	
	-	- Production a waste management	and	-	The use of renewable energy sources	
			waste		-	The increased use of energy
		-	Transportation		-	Production of industrial and municipal solid
					waste	
					-	The quantity of hazardous waste
				-	The quantity of radioactive material	
					-	The amount of waste recycling and reuse them
					on tran	The distance traveled per unit of capital based asportation

Table 6: Indicators of sustainable development: social indicators, Source: Enaiati, 2008

Axes	The st	ub-sections	Indicators
Equality and justice	-	Poverty	- % Of population below poverty line
	-	Gender equality	- Levels of income inequality (Gini Index)
			- Unemployment rate
			- Earnings ratio of women to men
Hygiene	-	Nutritional	- Nutritional status of children
	status		- Under-five mortality rate
	-	Mortality ratio	- Life expectancy
	-	Wastes	- The percentage of people who benefit from the
	-	Drinking water	facilities and proper sewage disposal
	-	Health services	- People who have access to clean drinking
			water
			- The percentage of people who have access to
			facilities and health centers
			- Immunization against childhood diseases
			<ul> <li>Percent of implementing family planning</li> </ul>
Education -		el of Education	- The number of people who have completed
-	Liter	acy	primary education
			- Level access to additional education of adults
			- The proportion of adults with literacy
Housing		Living conditions	- The building area per person
Security		Crimes	- The number of offenders per 100 thousand
Population	- I	Population change	*
			- Population of urban formal and informal
			settlers

Sustainable Development Objectives: The main objectives of sustainable development, basic needs, improved living standards for the promotion, protection and better management of ecosystems and a safer and happier future are listed. The widespread use of the concept of sustainability and useful indication of the strength of purpose and meaning in it, both for the city and for the other field (Qyasvand, 2007).

Concept and principles of sustainable design; sustainable design is an integral part of human civilization of Natural Resources recognizes that all life on the planet depends on it (ZakerHaqiqi, 2011) that this is a particularly low energy consumption and an increase in people's health, should be regarded as one of the most important conditions for sustainable design, along with other factors such as urban spaces architectural qualities, energy-saving, and saving energy in the work process (Haqiqatbin *et al.*, 2007), based on his book Matyn three fundamental principles for sustainable urban design is :first principle: giving priority to the recycling of buildings, infrastructure and existing road network by matching them with the new circumstances and needs. The principle of the protection and improvement of buildings and urban texture is emphasized.

The second principle of conservation of resources and natural landscapes. The third principle: to reduce energy consumption in the development of new urban areas (Mehrabani, 2007). Valdez Principles for sustainable urban spaces designed by the Androporgen company for the Park of America and colleagues developed a framework and policy guidance on how to design the present. These principles can be applied in any urban development that include:

- 1) Attention to the landscape as a part of independent and interconnected
- 2) Integration of natural landscape, even in fully developed
- 3) Improvement of biodiversity
- 4) Reuse of degraded areas
- 5) Rehabilitation becomes a habit (ZakerHaqiqy, 2010)

Urban Sustainability: term sustainability in terms of decades ago in the form of a set of broad principles to guide the development of economic, social and environmental measures at local, regional and global levels is used (ZakirHaqiqy, 2010) is also essential in many cities such as traffic congestion issues of land, buildings and desolate wasteland, waste, land use change, noise pollution, water pollution, air pollution, and many of the issues other environmental, urban sustainability pose. Evaluation of the late 1990s increased interest in urban sustainability. Sustainable urban systems can be broadly defined as urban development and the flow of current needs without degradation ability of future generations. The city is the urban sustainable use of resources, avoid excessive production of waste and recycle them as much as possible and adopt policies beneficial in the long run be able to maintain its existence (Safarabadi *et al.*, 2013), as can be observed in Figure 1 and 2, Figure number 2 indicates the desired stability and Figure number 1 represents the stability is undesirable because the components of sustainable development that is completely not pause with each other.

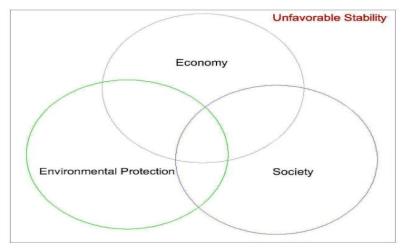


Figure 1: Consistent pattern of favorable and unfavorable urban environment

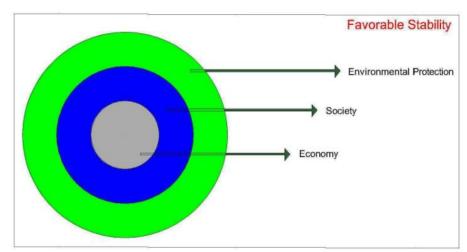


Figure 2: Consistent pattern of favorable and unfavorable urban environment

### Method of Research

The research and application of analytical methods and to gather information from the library and field method is used. On the theoretical foundations of library documents and procedures related to the subject of the research survey and compiled the guidelines and presented it to the analysis as well as in the field of organizing and the sustainability of the urban environment are provided.

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#### RESULTS AND DISCUSSION

# The Findings

According to a study organized in a variety of terms, demolition, renovation, restoration, protection, and promotion of quality, service, cooperation and many other words and terms of urban interventions were considered. Apart from organizing any term of these terms in the context of urban interventions with specific harmlessly if the word is organizing such harmlessly. The use of the word harmlessly organizing does not represent any scientific or legal action for the designers, urban planners and managers. The application of the term in the urban plan is just a title and a special requirement or scope for these plans does not explain. The organizing words alone do not explain the technical approach and the application must be accompanied by words and terminology in the field of urban interventions (Designs *et al.*, 2010). The planning and organization of urban land use, urban planning is the main platform, that the nature and ultimate fate of an urban plan largely to the possibility of recognition and intervention and monitoring of land use –dependent (Sarvari, 2010).

Sustainable design: sustainable design, as well as introducing a set of principles for the planning, designs and construction in order to protect and improve the health of communities and natural systems is dependent on the environment. that will affect on the design of land, use of atmospheric precipitation, groundwater recharge, prevention and recycling of waste generated and to prevent the production and release of harmful chemical substances in the environment will improve the quality of water and air and the vegetation (ZakirHaqiqy, 2010). Sustainable design is superior to a traditional design philosophy and style and even beyond. Environmentally sustainable design has not style or a particular point of view (Haqiqtbin *et al.*, 2007). But the need for planning, construction and maintenance in accordance with the principle of a slight impact on the environment and to which is changed or damage occurred to the desired location while the ecosystem, and to modify and to help restore it. Sustainable design is an integral part of human civilization knows the whole yard of natural resources in the planet depends on it. This led to the identification and understanding of the position in the center of urban places and the whole city of design and to maintain the survival of the natural substrate of human societies as they protect and corrected (ZakirHaqiqy, 2010).

#### Discussion and Conclusion

According to what was mentioned, it can be concluded that the essential and efficient resource for human life and all things considered and any source can be harmful interference irreparable damage to the planet and the life of all beings enter into a compromise,



Figure 3: Pattern of Sustainable city with less input and output and more recycle

Hence the correct planning and managing sustainable development approach in user-land with human societies in modern cities, especially metropolitans can be a practical and efficient solution to achieve a biological pattern is effective and sustainable. So obviously that is one of the most important concerns in today's designers in urban spaces and different tissues, reaching some sort of stable balance sustainable

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design is in the midst of urban spaces and the natural substrate to make it. The sustainable urban design should enhance human productivity and reduce stress and improve the living conditions. The following uses of studies, strategies to achieve this are listed.

Some of the policies and strategies that can be used include:

- 1. To minimize the negative environmental consequences of patterns of production, distribution and consumption of urban residents and the region;
- 2. Minimize the use of nonrenewable resources and gradually replacing them with renewable resources
- 3. Set the exploitation of renewable resources, commensurate with the rate of production Implementing strategies to achieve these policies include:
- •Reduce reliance on the private car
- Increase physical compactness of urban development
- •Reduce resource consumption and pollution of the city and its surrounding area
- •Improve the livability of human society
- •Lasting and strengthen the urban economy
- •Administrative reform and the rule of city

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