

SEA OF URBAN DEVELOPMENT PLANS IN TÜRKİYE

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ABSTRACT

Adopting the SEA applications which is mostly implemented in developed countries into the developing and underdeveloped countries which completed their national wide planning process is quite important in achieving the development in the light of sustainability. Necessary arrangements for SEA have been continuing since 2000 in Türkiye. It is stated in tenth article of the environment law (26th April 2006) that related subjects and other details for SEA will be determined in upcoming SEA regulation. SEA regulation draft was prepared by Ministry of Environment and Forestry. In the fourth article of the draft, plans which are covered by SEA were listed. However the main problem in implementation of the regulation is related to the questions of when and how SEA study for plans in the scope of regulation will apply. This paper aims to present the findings from a project on integration of SEA into urban development plans in Turkey. The aim is to test the concept of SEA at the level of local planning and analyze its possible practice opportunities of SEA on urban development plans.

Key Words: Strategic Environmental Assessment (SEA), Urban Development Plans

1. INTRODUCTION

Legislative SEA applications usually seen in development countries have a great importance for ensuring sustainable development in ongoing development process of countries like Turkey. Another importance for Turkey can be evaluated in the process of acceptance the European Union (EU). Preparation and related research was initiated in Environment and Forest Ministry, Environmental Impact Assessment and General Directorate of Planning which are especially responsible for issues of the legal in 2000. "SEA Draft Regulation" was prepared by the Ministry of Environment and Forests in 2005. The title of Environment was opened for discussion under Turkey's negotiations with the EU at the beginning of 2010. Therefore Turkey is obliged to prepare legislation for SEA until the end of this year.

But the most important issues related to the implementation of the Regulation are concerned about plans covered by the regulations for when and how to handle the SEA study. Therefore application of methods and facilities are important issues for the countries which are continuing their preparations about the object like Turkey or countries which are adopting SEA to their legal systems.

In this Project, the creation of SEA application model is intended for development plans. In this way, this study conducted in two stages; firstly has been working on a legal operation advice of SEA integration on city plans. Within the context, review of legal decision-making process for development plan and integration of SEA in this process was investigated. This part of the study, the basic steps was determined in legal process for SEA applications.

In the second part of the study, the method has been trying to develop for implementation of SEA on development plans. In the direction of the results of studies conducted in the first chapter, a proposal model was developed for environmental assessment will be applied on development plans.

2. METHOD

The method applied in the project was conducted in two parts according to the basic two objectives of the study. In the first section firstly; an assessment was made for legal integration of SEA. Studies reviewed in this section was conducted in 3 stages (Figure 1)

- Theoretical Framework and Scope Determination of SEA
- Urban planning system in Turkey
- SEA Implementation Opportunities on Urban Development Plans

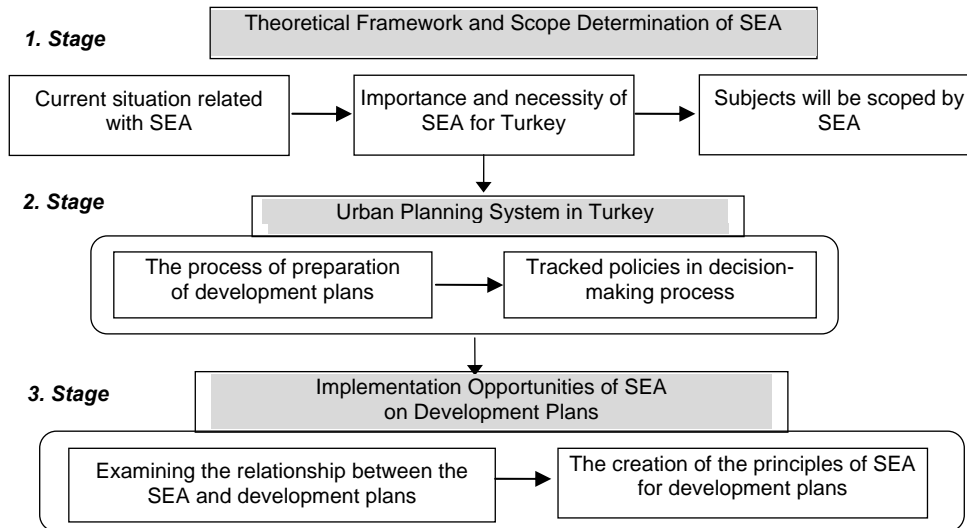
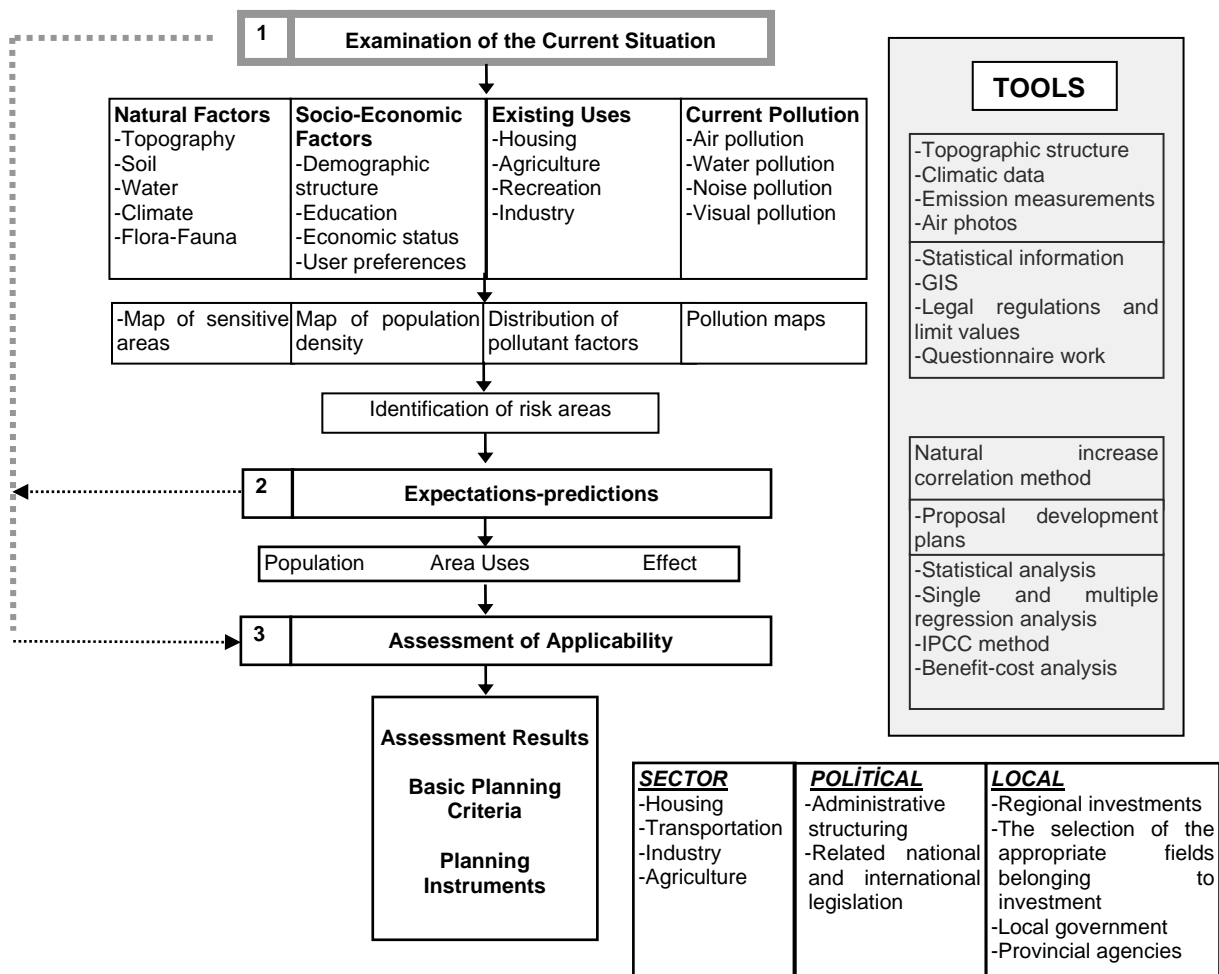


Figure 1. The basic steps of the method carried out from the first part of the study

In the second part of the study, the method which can be applied on a development plan for the SEA process was developed (Figure 2).



3. Characteristics of Turkish Spatial Planning System

Planning that is described as a process to solve current and forthcoming problems can be effective instrument only equipment with total approaches. A total planning approach directed to areas and locations can be realized only in a hierarchic system. Planning grades in Turkey have been defined with different laws. In the relevant laws, primarily in the Building Law, No.3194, plans have been described in a certain hierarchic range from upper scale to lower scale (Table 1).

Table 1. The planning hierarchy in Turkey

PLANNING TYPE			Frame-Scale / Responsible Authority	Scope
SOCIAL- ECONOMIC PLANS	national level	National Development Plan	Written statements-country plan / Prime Ministry State Planning Organization	-Macro-economic targets, -Sectoral aims, objectives and policies, -Social development aims
	regional level	Regional Plan	Written statements-regional plan / Prime Ministry State Planning Organization	-Resources management, -Preparation of sectoral plans and programmes so as to attain determined economic, social and physical aims.
PHYSICAL PLAN	LOCAL LEVEL	Environmental Plan	Sub region, province - 1/100 000, 1/25000 Local Governments	- Land uses decisions for sectors -Managing or orientating urban and rural developments - Ensuring the consideration of ecological, economical, cultural, social and physical values integrally - Determining the utilization decisions for protection of natural sources
		Urban Master Plan	Urban-1/2000, 1/5000 Local Governments	-Local land uses decision -Local land use density
		Implementation Plan	Urban -1/1000 Local Governments	-Dense built-up areas -Road and technical infrastructure
		Special aimed plans	Tourism development plan Reclamation development plan Rural development plan Special Protected Area Plan	

Table 1. The planning hierarchy in Turkey

According to the Building Law, No.3194, the phases of processes of preparation and approval for urban development plans are listed in below.

1. Determination of Boundary Area
2. Data Collection and Comments Receiving Preliminary Study
3. Determination of the Development Plan Examining Format
4. Stage: Analysis-Synthesis and Planning
 - 4.2. Synthesis - Combining Knowledge, Interpretation and Evaluation of Results
 - 4.3. Planning
5. Approval and Announcement

4. Integration of Urban Plan and SEA

Depending on the countries' planning process of the SEA, it's specified in the relevant publications that the legal system is very difficult to adopt (Partidário, 1996; Sadler ve Verheem, 1996; Asplund ve Hilding-Rydevik, 2002; Fischer, 2002; Say, 2004; Dalal-Clayton ve Sadler, 2005; Jones ve Ark., 2005; Fischer, 2007).

After the dated June 27, 2001, EU "Specific Plans and Programs of the Environmental Impact Assessment Directive", experiences in EU countries is a proof of how difficult the process of integration.

SEA application process and methods in countries vary according to the countries' planning system. Therefore countries, transferred or ongoing transmission SEA to their legal systems, are required to create own application methods and process comply with legal and administrative issues in their countries. In this research, basic stages of the SEA in land use planning are establishing. In this regard, process of physical planning, land use planning and urban planning were examined in countries which have the legally binding applications of SEA, and clarified how this process is associated with SEA applications (Bruton and Hutchinson, 1987; Kaiser, 1995; Asplund and Hilding-Rydevik, 2002; Fischer, 2002; Jones ve Ark., 2005; Moseley, 2005; Giedych, 2009).

In our country, very complicated urban plans preparation and approval process makes difficult SEA integration to urban plans in our country. According to SEA's general principles and planning process in our country, the SEA process is based on 6 phases: *screening, the determination of the scope, the preparation of the SEA report, quality control, decision making and monitoring*. In this project the content of this 6 phases were formed according to the responsibility of municipalities, the urban plan preparation process and the draft regulation on SEA

5. Urban Plans SEA Applications

Basic planning decisions, taken in the process of urban planning and play a role in the deterioration of ecological balance, are possible to put under four headings:

1. Site selection and land use decisions
2. Density
3. Orientation - the direction of growth
4. Transportation

This planning decisions' is quantity and quality effects the natural resources by the way both direct and indirect. Carrying capacity of the resources is also be coerced.

SEA can be considered as an important tool for reaching the right plan decisions about issues listed above. For this purpose SEA consists of different stages and different findings are obtained from SEA. In this research the risk factors affect the structure or structures become affected for Adana City and risk areas were determined. The basic findings of SEA for land use studies should be the risk map.

For this purpose, as a result of the assessments of the third phase of the Project, for Adana City and around affecting the urban structure or structures becomes affected risk areas were determined

For this purpose, based on the natural structure of the research area, suitability for urban use assessments taken into account the risk criteria and their sub-criteria have been put forward. After that, by using GIS program ArcView 9.2 risk maps were created according to risk scores are given in Figure 3.

One of the findings from examples of SEA applications in the second part of the project was presented in this paper. The findings obtained from this part of the project are summarized in Table 2. The urban plans to apply SEA collected under the current situation (today), the possible changes (future), and measures titles.

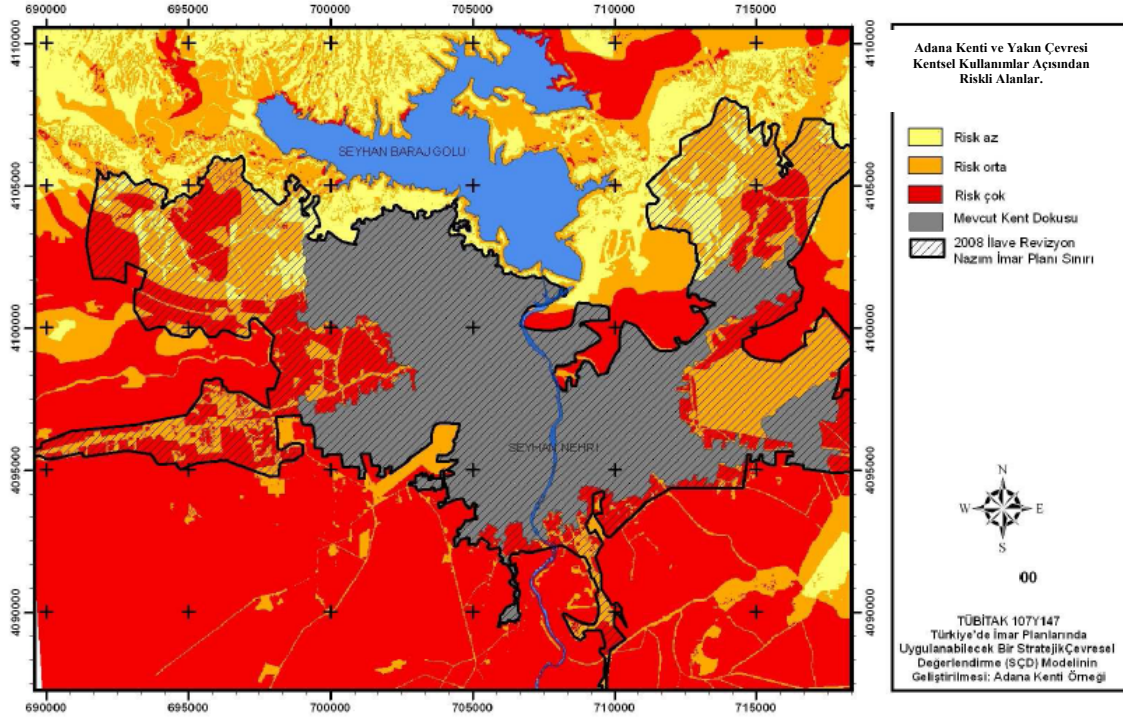


Figure 3. Adana City and Around in Terms of Use Risk Urban Areas.

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Table 2. SEA on urban development plans

	Phases		Ancillary Tools
TODAY	1-Determination of the Present Situation		
	Land uses	Sector production-consumption situation Natural resources used by sector	Statistical data
	The pollution situation of the research area	Pollution maps Pollutions caused by sector	Meteorological and topographic data GIS Emission measurements Scientific researhces Statistical data Limit values
	Population of research area	Population density, urban and rural population	
	Sensitive Regions and Protected area in research area	Protected areas Historical and cultural areas	Protection statutes Maps for protection areas
FUTURE	2- Proposed Scenarios for the Future		
	The Development of the Sector	Sector share in economic growth Change in the sector production and consumption	Economical analysis Statistical analysis
	Economic Development	Basic economic indicators towards economic growth	Basic economic indicators in development plans
	Projection of Population	Population growth	Methods of population prediction
	Impact Assessment	Impacts caused by sector	
PRECAUTION	3- Evaluation applicability		
	The Results of the Evaluation	Co-evaluation of subjects in the 1. and 2.phases	
	Basic Evaluation Criteria	Criteria determining the general frame of the policy Activity determination for the practice of criteria	
	Policy Tools	Sectoral, Political, Local	Local governments and their policies Administrative structuring National and international law