

How to Cite:

Masoumi, M. (2022). Urban land use decision making system in Iran and Sweden. A comparing study for eliminating system weaknesses in Iran. *International Journal of Health Sciences*, 6(S7), 1488–1498. <https://doi.org/10.53730/ijhs.v6nS7.11553>

Urban land use decision making system in Iran and Sweden. A comparing study for eliminating system weaknesses in Iran

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Abstract---The urban decision-making systems are very different and significant in the urban planning process and structure. Sweden and Iran have prepared their urban planning decision-making system around 1970. After about fifty years, the results in both countries are too different. The Swedish system is developed and responsible, on the other hand, the system of Iran has faced some problems. This article will compare and investigate the structure of both systems with a special focus on imperfections in the system of Iran. About 65 percent of 85,000,000 people are living in 1300 cities of Iran. This imperfect decision-making system has some huge negative effects. Studying on this case is important for the economy and urban planning structure. In the end, the article will have some suggestions for enhancing the Iranian System.

Keywords---Master plan, land use, planning, decision-making system, urban, system.

Introduction

The structure of the decision-making system is very significant in the urban land use planning process. Systems are very different because countries and cities are different in culture, economy, and especially in national and local administrative organizations (Vetrova EA, et. al., 2020; Komov, M., et. al., 2021). The quality and applicability of decisions are under the effect of the decision-making system. All urban land use decision-making systems should have an integrated, responsible, flexible, and harmonized organization and structure. Unfortunately, some cities have problems in their systems; also, they do not have acceptable efficiency. Imperfect systems will waste sources, times, and quality of urban life. For example, Tehran as the capital and metropolitan area in Iran does not have enough sustainability in its land use.

It is assumed that some of these weaknesses are the outcome of several disorders in its land-use decision-making system. More study activities and projects in Iran have tried to prepare and suggest suitable systems. Some studies have been done around the world including Sweden, Denmark, Finland, USA, and UK. All of them have compared various systems and tried to investigate problems and to share their advantages. In addition, some cases from the USA and UK have been studied and investigated by experts in Iran. Sweden is a developed country with some cities known as sustainable cities. Swedish experience can be different and useful for Iran and it will add knowledge of audiences in this discipline. Therefore, this study will explain and compare urban land use decision-making systems in Iran and Sweden. The urban land-use decision-making system in Sweden will be focused on a suitable symbol from a developed country. Finally, as a result, this study will draw out some advantages and applicable characters of the Swedish case and will suggest them for applying in the case of Iran. The study will prove some suggestions for eliminating defects in the system of Iran.

According to the study conducted by Ali Kamrava, the modern land-use planning system began since 1971 in Iran (Kamrava, Ali., 2009, Pp. 16-40). Our study showed that the modern land use planning system in Sweden also began in 1971. Nevertheless, achievements in Iran and Sweden are not comparable since they are different stories.

Theoretical background

In fact, land use planning and its decision-making system were relevant from a hundred years ago. The history of land use planning is as old as cities history. All of these systems are different, but they have some similarities in structure. For example, the decision-making system in developed countries is very advanced. The history of the decision-making system in Iran has been divided into two essential periods. First, before beginning modern urban planning. In this period, the land use planning was operating in a traditional way. In this way, the map and figure of the cities were formed during the time by individuals and developers. Cities did not have any developed maps or programs. This kind of land use figuring was named "organic development". Those organic textures are current in the old neighborhoods of Iranian cities, and they are relative to this period. Second, after 1971, a new period of land use planning started. This period was named "modern urban and land use planning period". (The High Council for Urbanism and Architecture of Iran, 1997).

In this new and modern way, all municipalities had to prepare a plan for cities named "master plan", in the same year "The High Council for Urbanism and Architecture of Iran" was established in "Urban Planning and Architectural Ministry". This council is the highest council for urban decision-making in Iran and should recognize all master plans. The idea, methods, figure, and process of preparing Master Plans in Iran is an emulation from the USA. *.

* The "master plan" is a kind of developed plans. It is relevant in all cities around the world. However, methods, techniques and concepts are different. In master plan, planners prepare a plan for ten next years. It has been relevant for first time in United Kingdom in 1947. Before that time, planners did not have integrated idea in planning. They were pay attention only on architectural

The organic development had some characteristics and problems in urban textures: narrow roads, high traffic, overcrowded cities, polluted weather, weak infrastructures, etc. After arriving at the modern development by master plans, some problems were solved or reduced. Moreover, the form, design, and quality of urban life, urban transportation, and especially urban ecology increased. Unfortunately, after the Islamic revolution (1979), the methodology of the master plan and especially its decision-making system was not updated. So, urban development in Iran has faced new challenges (The High Council for Urbanism and Architecture of Iran, 1997).

This study assumed that applying strong points of the Swedish system in the system of Iran would be helpful for repairing and updating. Some previous researching activities have used this model for evaluating planning systems, so they are good and relevant examples (Helka-Liisa Hentilä and Leena Soudunsaari, 2008).

Questions of Article

This study has three essential questions, which were key factors and the same essential questions in previous research on Scandinavian Countries. All these questions will be answered at end of the study;

- 1) What are the hierarchies and essential character of land use decision-making system in both cases?
- 2) What are the weaknesses or strong points of both systems?
- 3) Which characters of the Swedish system could have positive effects on Tehran?

Method

This study will continue by describing and investigating both systems from Iran and Sweden. Information about two cases were gathered from documents, articles, books, and reports that are accessible in a library and on networks. Systems will compare and contrast together. Some essential characters of systems will be highlighted in this comparing. The hierarchical process, level of flexibility, avoiding from concentrating, and especially the current problems will be mentioned. Then, some advantages of the Swedish system, which are applicable to Iran, will be selected. Analogy and comparing methods have been chosen for investigating to cases. Fortunately, the study did not have any special limitation. In this study for the Iranian system, some examples will be presented from Tehran.

aspects. In master plan, they apply all cultural, environmental, economic, and other aspects. Because of these multi aspects, it has named as “master plan”.

The term “urban land use planning” used in this paper means making decisions and plans for the spatial organization of urban actions and performance based on the public needs and demands (Ziari, Keramatallah., 2002, 5).

Acknowledgments

In this section, both land-use decision-making systems will be discussed.

A; Land use decision-making system in Iran: The decision-making system in Iran is complicated and hierarchical. All cities should have a master plan. For example, Tehran has a Master Plan, it was recognized in 1997 by “Higher Council of urban planning and Architecture of Iran”. The scale in the master plan is 1:25000, it does not show all blocks, pieces of lands, streets with less than 20 meters width, alleys, and small parks. So after five years, another map as “detailed plan” was recognized. In fact, the “Tarh Tafsili” follows the master plan, but with more details. Land use planning occurs and is obtained by “Tarh Tafsili”. The “Tarh Tafsili” should pass the same hierarchy for recognizing and changing.

The essential goals, strategies, and policies of decision-making occur in the master plan. Preparing a master plan should process these hierarchies:

1. The first base of the master plan is prepared by urban planning adviser engineers,
2. Expert of municipality investigates the plan,
3. The city council should recognize the plan,
4. In the fourth level, the plan should be investigated in the Planning and Development Council of Tehran Province
5. Recognizing the “Higher council of urban planning and architecture of Iran” is the final level.

Passing this hierarchy will take about five years because the plan will be changed by all involvers. They will apply all their tastes in the concept and structure of the plan. The “Tarh Tafsili” should pass the same hierarchy for recognizing. This process will take about four years. It is important to say that, every change in a parcel of land use plan, needs passing the same process again. This process took two years (Table 1).

Table 1: The Planning System of Iran. (The High Council for Urbanism and Architecture of Iran, 2008, P9).

	POLICY INSTITUTION Planning authority	POLICY INSTRUMENTS Type of plans	Legal effect
NATIONAL LEVEL	Parliament, Government, Ministry of the Environment	(National planning guidelines)	Essential binding
Provincial	Provincial		Essential binding

	planning Council	(No Plan)	
LOCAL LEVEL	Municipal councils	(Master plan)	Little Binding
		(Detailed plan)	Little Binding
		(Area regulations)	Little Binding

Special weaknesses and characters of the land-use decision-making system in Tehran: 1) –this system takes a long time, for about nine years, because the master plan is not responsible and enough for having an applicable land use map. Therefore, the municipality and people have to wait for preparing both plans (Master plan & Tarh-e Tafsili). 2) –Essentially, the map of land use is not fixed and unchangeable. This map should have enough flexibility. However, this hierarchy in Tehran does not have enough flexibility. It is a bad kind of centralization in the system. This system prefers to involve all kinds of changes in land uses. It does not let independencies to the municipality. 3) – master plan of Tehran is only for Tehran and not for surrounding cities. In Iran, it is not a recognized and applicable regional plan. For more information, see Tables 1 and 3, and the Document of Master Plan of Tehran.

The history of modern planning in Iran goes back to 1949 and the foundation of the “Planning Organization” (Tabesh, Ahmad., 2004, P.62). However, “land use planning” has been postponed in Iran following the studied background of urban planning. Although some measures have been taken in 1956 to design urban development plans in Iran, the modern and comprehensive urban land use planning began in 1972 when “Law on Establishment of Supreme Council of Iran Urban Planning and Architecture” was approved (Mofarrahi, Hosein., Khaligh, Abbasali., 1997, P.89). After “Law on Establishment of Supreme Council of Iran Urban Planning and Architecture” was approved, comprehensive plans, land use, and land zoning were on the official agenda of “Ministry of Development and Housing[†].” This law defines different types of urban development projects, the Supreme Council's duties on comprehensive urban plans and detailed urban plans, the approval process of land use, and land zoning.

Now, land use planning is done while preparing urban development plans in Iran. Various practitioners are working on urban development plans. For instance, some plans called the “Urban Guide Plan[‡]” are organized by the Ministry of

[†] In 1974, the “Ministry of Development and Housing” changed to “Ministry of Housing and Urban Development” and merged into the Ministry of Road and Transportations, then was named “Ministry of Road and Urban Development.”

[‡] Guide Plan (Tarh Hadi) is a plan that directs urban development for 10 years without considering detailed and comprehensive plans. These plans are designed by the Ministry of Interior and governorates. It is worth noting rural land use planning is done based on a different structure, which is distinguished from the urban system. The extant study was conducted on “urban land use planning”; hence, rural land use planning has not been examined.

Interior for cities with a population of less than 25000 people, while Master Plan is designed for other cities. The Detailed Plan is designed besides Master Plan for these cities. Both master and detailed plans are designed by the Iran Ministry of Roads and Urban Development, as well as the Provincial Urban Development Administration (Jamshidzadeh, Ebrahim., 2011, Pp.67-70).

It should be noted that land use determination or land use planning is done within three trajectories in Iran. First, land use planning is done through legal cases by approving urban development plans, Guide, Master, and Detailed Urban Plans by the Ministry of Road and Urban Development. Second, this process is done through common rules and regulations so that owners play a vital role in land use planning. For example, the existing bylaw sets that owners and municipality can submit their demand to the commission called "Commission of Article (5) of the Law on the Establishment of the Supreme Council of Urban Planning and Architecture of Iran" asking for enhancement of building density and land-use change. This commission may take a long period of several years permitting to change, correct, and revise the regulations related to building construction and land use (Abbaszadeh, Shahab & Ghorbanzadeh, Mehrdad & Abbaszadeh, Abdorreza., 2011, P.103). Third, the process is pursued through the authority and tendency of owners by committing various construction violations. About 20% of land-use change cases are implemented illegally by people, constructors of buildings, and establishments. A commission called "Commission on Article 100" is attended weekly to investigate such construction violations. This commission comprises three members who can issue the vote of "destruction and restoration or cash fine" through a procedure based on some rules and regulations about the land-use changes (Moosavi Moghadam, Mohammad 2016, P.29).

Interestingly, many land-use changes and excessive construction of buildings are not considered criminal cases but are taken as violations. Municipalities gain considerable revenue for such violations so that they predict a certain line and fund violation incomes (fines received from illegal land-use changes and constructions) in their annual budget sheets.

There is not any database to store, evaluate, analyze, and process the changes in user changes and regulations caused by the two procedures mentioned above (Article 5 and Article 100). In other words, these changes are usually based on the shared financial interests between owners and municipality, which do not lead to serious social, environmental, and cultural implications in long term. Therefore, such turbulences and numerous decision-making authorities have led to undesired circumstances. In particular, traffic jams, social-environmental pollutions, excessive concentration of wealth and activity, high cost of housing and estates can be named as problems facing many citizens in some cities such as Tehran.

Land use planning leaves a more considerable effect on the life of people rather than a sense of use change in a piece of land. However, land-use change leads to many financial and economic consequences. Land-use change can make the

owners poor or rich (Needham, Barrie., 2006, P.3) since land-use change affects the value and price of lands and properties[§].

Nowadays, excessive land use in Iran has become a crisis in both constructed urban spaces, and agricultural lands, gardens, and farms. This phenomenon usually occurs in megacities and destroys farmlands (Moosavi Moghadam, Mohammad., 2008, P.9).

Moreover, unreasonable decisions made on urban and land use planning have led to worn texture in cities. For instance, 10% of the total area of cities, including 45 cities of the province particularly Tehran has been detected as worn texture. Hence, various rules have been approved to reconstruct and revive the worn textures since 2006 in Iran (Urban Development and Revitalization Organization of Iran, 2015, P. 9). Hence, we hope better decision-making process of the land urban planning system in the future.

B; Land use decision-making system in Sweden; The planning and land use decision-making system in Sweden is a developed system. It has three essential levels; National, regional, and local. Cities are at the local level. "This system does not have hierarchical, but it is based on a decentralized dialogue between the national, regional, and local levels. The role of national land-use planning is too weak. The most important ministry in the field of land use planning is the ministry of the environment, supported especially by the National Board of Housing, Building, and Planning" (Helka-Liisa Hentilä and Leena Soudunsaari, 2008, P8).

"The main planning laws in Sweden are the Planning and Building Act (Plan och Bygglag) and the Environmental Code (Miljöbalken). One of the main objectives of the two laws is to secure good living conditions for people today and in the future (a long-term good management in ecological, social, cultural, and economic terms)". (Helka-Liisa Hentilä and Leena Soudunsaari, 2008, P9) (Table 2).

"Planning on the national, county, and regional levels does not result in any legally binding regulations, with the exception for the preservation of certain specified areas. The plans aimed to give guidelines and improve the cooperation and discussion between the different sectors". (Helka-Liisa Hentilä and Leena Soudunsaari, 2008, P10). (Table 2)

Table 2: The Planning System of Sweden. (The High Council for Urbanism and Architecture of Iran, 1997).

POLICY INSTITUTION Planning	POLICY INSTRUMENTS Type of plans	Legal effect
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[§] Land use has been divided into different categories. You can refer to the "Urban Space" Book written by Gauthize, Bernard to become familiar with this classification. This book was translated into Persian in 2018. This book has examined different kinds of expressions associated with urban spaces and uses (Gauthize, Bernard, P.18).

authority

NATIONAL LEVEL	Parliament, Government, Ministry of the Environment	<i>Rikspan</i> (National planning guidelines)	Advisory guidelines
REGIONAL LEVEL	Regional planning body	<i>Regionplan</i> (Regional plan)	Not binding
LOCAL LEVEL	Municipal councils	<i>Översiktsplan</i> (Master plan)	Not binding
		<i>Detaljplan</i> (Detailed plan)	Binding
		<i>Områdesbestämmelser</i> (Area regulations)	Binding

In this system, all cities should have a Master plan. In addition, cities should prepare another plan as a “Detailed Plan”. “The Land Use Map” is one of the several maps of a detailed plan. The municipality has independency in decision-making for all land uses of the city. Of course, they should observe all Laws and Codes of national and regional levels. In addition, the map of land use and detailed plan are changeable easily in a short time by municipalities. The main responsibility of planning must confer to the municipal level. (Table 3).

C; Answers to designed questions;

1-What are the hierarchies and essential character of land use decision-making system in both cases? Comparing and contrasting both systems shows that systems in Sweden and Iran have some similarities and differences. Both of them have a master plan, detailed plan, land use map, a decision-making system, and some laws and codes at national, regional, and provincial levels.

2-What are the weaknesses or strong points of both systems? The results of both systems are very different. Swedish land-use decision-making system is flexible, easy, decentralized, with perfect independency, responsible, fast, updated, and it observes national and regional laws. Swedish system has these characters because its structure is developed. However, the system of Iran is hierarchical, centralized, dogmatic, slow, with less responsibility to citizenships, and a high dependency on urban planning and housing ministry (National Level). In Sweden, regional plans are very useful for the division of duties between cities, but in Iran, there is no regional plan for regions. In Iran, there is a Council in all provinces for decision-making. On the other hand, there is no land-use plan or master plan for provinces. (Table 3).

3-Which characters of the Swedish system could have positive effects on Tehran?
A; The independency in the Swedish local level and B; preparing regional plans in Sweden could be very positive for the system of Iran (Tehran).

Table 3: The Hierarchies of urban planning and urban decision-making system in Sweden and Iran.

Administrative Levels	Sweden	Iran
National	Ministry of The Environment (Laws and codes)	Urban and Housing Planning Ministry (Laws and codes)
Regional	Regional Plan	-----
Provincial	-----	High Council of Planning and development
Local	Master plan	Master plan
	Detailed Plan	Detailed Plan and local legislations
	Area legislation	-----

Note 1: In Iran, all local and provincial levels have little permission to give some suggestions for decision-making. In addition, the final decisions will be made at the national level. For more information about Tehran see (The Document of Master Plan of Tehran).

Note 2: for more information about Sweden see: (Helka-Liisa Hentilä and Leena Soudunsaari, 2008, p9)

Discussion

This study proved that decision-making in Sweden is completed and developed. The Swedish system led to some sustainable, harmonized, and comfortable cities; however, the system of Iran faces problems. In general, the system of Iran is disabled in solving problems. According to the advantages of the Swedish system, and on the basis of designed questions, this study has some suggestions for repairing the decision-making system of Iran, which are as follows:

1-In the national level, the Ministry of Housings and Urban Development should have solely the role of surveillance in high levels in the city.

2-Urban Planning and Housing ministry should give all authorities to the local level (for cities) in recognizing master, detailed, and land use plans and maps.

3-The regional plans should be prepared for all regions. In addition, Iran should establish administrations for the regional level. Governors could carry this authority and duty at the provincial level until establishing regional administrations. In this way, we will have provincial plans.

4-The Ministry of roads and urban development should be solely the role of surveillance in high levels in the city.

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