

# Analyzing The Urban Spatial Planning Methodology in Iran And Austria

# \*Shirin Giahi<sup>1</sup>, Johann Zancanella <sup>2</sup>

<sup>1</sup>PhD student candidate, department of Urbanism, Graz University of Technology, Graz, Austria 
<sup>2</sup> Dipl.-Ing. Dr, department of urbanism, Graz University of Technology, Graz, Austria 
Corresponding Author: \*Shirin Giahi<sup>1</sup>

ABSTRACT: Spatial planning is a very substantial and challenging subject for all countries of the world. It is neither a technical nor scientific issue but it helps creation of a strong, safe and successful community become easier. Spatial planning policies not only in different countries but also in cities of a specific country may differ. It would be vital to verify the best policies of prosperous countries in order to make a leeway to help other countries reach high humanistic and social dimensions. This paper aims to review the characteristic of Urban spatial planning approaches in Austria as a developed country and Iran as a developing one to assess their spatial planning systems. It also tries to address the weak and strong points of methodology of them and finally have chosen Tehran and Vienna as two capital cities to compare the implemented spatial planning approaches. This comparison will figure out the neglected points, rules and also will help modifying the defects and lack of proper coordination and responsible mechanism for future urban planning. The methodology in this paper is descriptive- analytical. The work process is as library and visual observations.

Keywords: Austria, Iran, spatial planning, Tehran, Vienna

### I. INTRODUCTION

Spatial planning is the interests and objectives of human beings. There are some conflicting issues between interests and objectives which cannot be ignored or remove. They may limit the spatial planning perspectives but practically it would be important to accept this conflicts because this acceptance finally leads planners to find admirable policies to solve the problem (OECD,2001). This paper has chosen two well-known countries "Iran and Austria" as the case study because although they situated in different continents with completely distinct social and economy and cultural treats, but also there are some similarities in Urban spatial planning process that both countries follow. After second world war by exponential growth of the cities' population, it would be obvious that the cities demand contemplative development. This urban development, independent to the location of the cities all around the world need to have a regulated urban planning process. The process should be controlled and needed to have revision before every implementation (Madanipour, 2006). The main objective of this research is to compare these two countries tools to define their spatial planning functions. To get close to the main purpose of the project, two aims are set: first, to introduce common dimensions and variables to classify planning processes; second, to compare and find the problems of the planning process between two countries by highlighting the main similarities and divergences. In this paper, an analysis of planning processes and relative products for urban development adopted in two selected countries is presented. Doing so three phases are set; first phase: spatial planning process in Iran, second phase: spatial planning process in Austria and third phase problems and deficiencies statement of planning system. In final, investigation on this research will underline some of the main issues which need to be addressed to get the best outcomes in spatial planning decisions. It looks at the main obstacles and at what can be identified as key factors for success. This paper first collects data and then review and analyze due to consult them with city authorities and citizens.

# II. FIRST PHASE: SPATIAL PLANNING PROCESS IN IRAN(TEHRAN)

Iran is a country with around 82 million populations and the total area of 1,648,195 km² (Worldometers, Iran,2017). the capital of Iran is Tehran with the area of 730 km² and population of 8,846,782 million (Worldometers, Tehran,2017). It is quite conspicuous that the capital cities are the first and foremost to perform new policies due to their social, political and economic importance. In this case, Tehran was the largest city where needed a pre-defined and futuristic urban program. Through population growth, Uninterrupted

immigration to big cities of Iran and Priority of rapid urban development on process of planning and development caused serious failures in cities and provinces.

The first traces of urban planning in Iran turns back to before second world war, that government tried to show a new perspective of urban structure to the citizens till 1930 (Madanipour, 2006). Urbanism in its first steps did not have comprehensive plans in Iran. The urban development planning was based on comprehensive plan which was a general program with integrated and complete procedure for urban development. The first plans were exclusively street plans, for instance in Tehran in 1925 streets were highlighted as the most important points in urban plans. The first defined urban development programs started in 1961 which were simultaneously with other cities of the world (Moeini ,2013). As mentioned, before 1961 different urban development point of view configured, for instance in 1925 when Pahlavi reign formed, the conversion of cities from traditional to modernistic forms happened. Through the government new connections with other countries the new city conversion without any stable and determined infrastructure organized and city was one of the sections that lost its traditional and cultural values to get close to modernistic transformation. In this era, government played a key role as a powerful and independent institution to convert the spatial city planning. This import was not a complete procedure because they are not prepared due to the culture and traditions of Iran. To put it another way, the methodology for urban development in Iran was found as an imperfect copy from succeeded cities and this imitation couldn't implement its real responsibilities either in design or practical cases. For the first time in 1966, the municipality provided a legal framework of urban planning in form of comprehensive plan which got its first approval on 1968. During Islamic revolution of Iran at 1979 there were some changes in comprehensive plans which was the dominant approach of that time, these changes affect and reformed the plans and its procedure. Unfortunately, this process didn't play an effective role in urban planning for roughly two decades because the comprehensive plans in case of implementation contained lots of problems. In this period Spatial urban development in Iran doesn't have a specified policy specifically for human's better life and could not be responsible to citizens' requirements, it also created additional problems for them.

During 1997-2005 by a new political revolution people of Iran got a new point of view about the government and simultaneously in this dates reconstruction of the city reformed. During these years the cooperation of central and local government were highlighted and to get close to reconstruction ideas, the first city council members were elected in 1999. So it would be obvious that this council would propose new texture and approaches to the city and for its new development. The bolded support of this council was the participation of citizens in the process of cities decision making (Rasoolimanesh, Jaafar, Badarulzaman ,2013). It would be precious to emphasize that the one sided method of decision making by government or in smaller scale municipalities will not be able to provide appropriate facilities for citizens, but conversely, if they consider the citizen's participation in Urban issues, it would support the concrete success of the project. Admittedly, people do live in cities and citizens live in variety of conditions such as individual, family and as a group. There is no doubt that the role of volunteer citizens through comments, proposals, decisions and acceptance of their responsibility for the relevant work should not be ignored.

Contemporary urban planning of Iran suffers from many defects such as lack of finance, the poor participation of stakeholder's, the existence of various organization in urban management process without appropriate coordination, lack of local authorities' power and low capacity of the municipality, Imbalanced development and the most important problem is poor implementation (Daneshvar, Ghafari, Majedi, 2015). The general process of comprehensive programing of Tehran has been formed by incorporation of six substantial programing context which are economic, environmental, social and cultural, infrastructure and mobility network, structural, management and organization. By considering the importance of these six context, three programing level "strategic, structural and action" were created that finally lead to preparation for the practical part that was comprehensive, master, subjective and local plans. As the diagram shows the process of planning divided into two main parts which are decision making and decision taking of comprehensive and detailed programing of Tehran (figure1). The precise concept of choosing this mechanism isn't manifested in relevant documents and this could be a main problem in creation of comprehensive plan but by scanning all details of this process it seems quite logical.

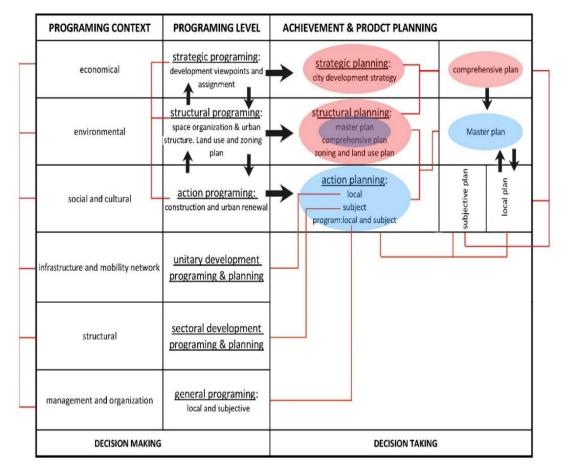


Figure 1, the comprehensive-structural programing chart, source: Moeini, 2013

In order to switch the planning project from theoretical programing to more practical it would necessary to go deep into details in different geographical scales. There are four levels of urban planning in Iran which denominated as national, state, regional and local levels (figure 2).

#### - National level:

In this level the spatial strategic plans provide regarding to the important context of programing. These plans consist of sectoral national plans such as national housing plans, agriculture, educations and etc. In this level the plans reflect the twenty-year vision of Iran and also the development plan in economic, cultural and social prepare for five years in this category. So it would be precious to indicate that in national level the new viewpoint to create a connection network to facilitate servicing and territorial management proposed. It also locates for the future expansion of current urban system and for new cities and towns.

#### - State level:

In this level the physical national-regional plan and twenty- year vision of the provinces provided. The same as national level the state level locate for the future expansion of current urban system and for new cities and towns, it also come up with new connection networks to facilitate servicing and territorial management.

#### - Regional level:

In this level the regional structure plan formed and there are new Proposals in case of policies and strategies to control, develop and locate activities and service distribution for residents.

## - Local level:

This level is substantial because the urban plans finalize in this level. In this phase of urban plans are consists of, master plan which contains regulations to preserve historical places and natural landscapes, and a long term plan for determining industrial, agricultural, residential and etc. urban detailed plan that follows the master plan to complete with more details. Zoning plan or rehabilitation is for organizing public spaces such as

streets, squares and historic areas to preserve in urban context and promote the quality of environment and social interactions.



Figure 2, hierarchy of planning in Iran, source: Hanachi, Massihi, 2001

# III. SECOND PHASE: SPATIAL PLANNING PROCESS IN AUSTRIA(VIENNA)

Austria is a neutral and rather small country in the center of Europe with around 8 million inhabitants (2017) and total area of 83,879 m² (Worldometers, Austria, 2017). It has one major metropolis "Vienna" with population of 1,863,881 (1 Oct 2016) (Wikipedia, Vienna). The first launch of expansion in Vienna dated back to the 1850. Before the mentioned date and after the constitutional amendment of 1848 the City Council and its legislature was elected (Municipal and provincial archives of Vienna). Austria is a federal republic which divided into nine states with nine different spatial planning laws. These states adjust the enactment process of spatial planning and they establish the objectives and guidelines of planning policy. the collaboration between them specially in border regions is voluntary but customary, it can easily prove the cooperation of states regarding to their different legislations. This legislation in every province has its own spatial planning concept, separate strategies for different regions for transportation, sport centers and its facilities, education and shopping centers, etc.

The Plan making strategy in Austria divided into different levels: there are four levels of administrative and authority and three levels of territorial authorities, the former are Federal government, States, Districts and Municipalities state, which federal, state, municipality could also be territorial subsystem (Nagy, Timár, Mangels, Bölsche, Berdavs, Transnational comparison of national policies and planning systems).

-Federal level: co-ordination and sectoral plans

Austria in controversy with other European countries doesn't have a planning law and spatial planning competence at national level (spatial planning and energy for communities in all landscapes). The Austrian conference on spatial planning (ÖROK) was rooted in 25th Feb 1971 and stablished by federal government (Austrian conference on spatial planning). The responsibility to enact laws, is divided between the federal state and the states. Austrian Spatial Development & Territorial Planning System divided in to three main territorial scopes; national, regional and local which all items have different action in federal administration and federal legislation. The main goal of ÖROK is to associate the national level and communities. Its duties are to put the different spatial planning systems in harmony and also coordinate the European Union and Austrian planning agenda, it is also responsible to promote and publish spatial development of Austria every ten years (Nagy, Timár, Mangels, Bölsche, Berdavs, Transnational comparison of national policies and planning systems).

-State level planning

The plans which provided by states are only for public and state administration at the lower level such as municipalities. To put it another way this plans don't have any direct effect on the dwellers and business. Cities and municipalities in state level planning have independent competence of local spatial planning. In state level the municipal council has the duty to enact the local development scheme, land use plan and local development plan with their defined scales.

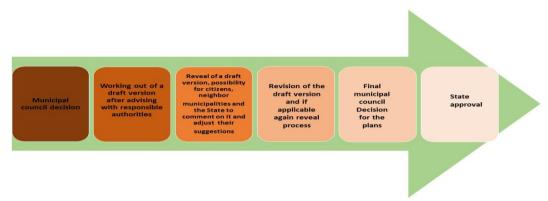
-Local level planning(municipal)

In municipal level the competence is act as an independent planners and economic bodies. In local level the development plans establish for long term objectives at a general level for ten years and they are different from states to states. In this level, also provide land use plan which includes the general description about permissible use of land and the zones that municipality divided into for specific purposes. The local development plan shows the zones where the buildings have to be situated in the site. It contains the details such as maximum height of the buildings, buildings aspects and different possible specifications for their design. Some provinces divide the local development plan into two plans, plans in general level for the whole urbanized land and more specific plans only for bigger building sites. In local development plan it would be important that the building integrate to the site and if there are some existing buildings that do not match to the zone, can be exist but not allowed to do big change in their structure (figure 3).

GEOGRAPHICAL SCOPE	INSTITUTIONAL LEVEL	PLANNING SYSTEM	SECTORIAL POLICIES
NATIONAL	*FEDERAL LEGISLATION *FEDERAL ADMINISTRATION *ÖROK	*PREPARATION OF SECTORAL PLANS AND CONCEPTS BY FEDERAL AUTHORITIES (no federal competence in spatial development)	SECTORIAL LEGISLATION (legal & financial measures)
*STATES(9) *REGIONAL	*IÄNDER LEGISLATION * IÄNDER ADMINISTRATION	*SPATIAL DEVELOPMENT PROGRAM *GENERAL SPATIAL DEVELOPMENT CONCEPT *REGIONAL DEVELOPMENT PLAN IN GENERAL AND IN SPECIFIC PROGRAMS	SECTORIAL LEGISLATION (legal & financial measures)
LOCAL(municipality)	MUNICIPAL ADMINISTRATION	*PREPARATION OF LAND USE PLAN FOR THE MUNICIPALITIES (1:5.000) *PREPARATION OF LOCAL/SPATIAL DEVELOPMENT FOR MUNICIPALITIES (1:10.000) *PREPARATION OF ZONING PLAN (1:1.000-1:500)	LOCAL INFRASTRUCTURE, APPROVAL OF CONSTRUCTION

**Figure 3,** planning process in Austria. source: Schremmer, Austrian Spatial Development Strategy in a European perspective.

In Austria there is planning advisory board which keep control on the planning of the cities, all the plans should comply with the province's spatial planning legislations. They are checked by the province's supervisory authority of the municipalities, which is located in the planning department of the state. In addition, the plans have to include all projects at higher level. The approval of the planning procedure to finalize all local plans (local development scheme, zoning plan and building regulation plan) is as follows in figure 4. Not to be forgotten that this process in takes times in various stages.



**Figure4,** The Austrian planning procedure to work out all local plans. Source: Transnational comparison of national policies and planning systems

Vienna is province as well as municipality (with 23 districts). As Vienna is including in the typical post-war mode of economic growth and its associated political and social order in advanced capitalism, Spatial development lies within the authority of the Municipal Council, served by the City Administration. The districts do not have any spatial planning authority. The steering committee of the city province management in Vienna is as follow (figure 5).



Figure 5, staff of the city province management. Source: SUM, Stadt- Umland

# IV. THIRD PHASE: PROBLEMS, DEFICIENCIES STATEMENT AND PROPOSED SOLUTIONS

# 4.1. problems and deficiencies statement

In both countries it would be obvious that the Practice in some sectors lagged behind the intention of the laws. However contemporary urban planning and management suffers from many deficiencies such as lack of stakeholder's participation, the existence of diverse organization in the process of urban management without proper coordination and responsible mechanism and prolongation of the process, lack of local authorities' power, lack of finance, and in some cases poor implementation. In Austria lack of a general legislation for whole states can cause some difficulties in implementation and may prolong the urban spatial planning process as well. The sectoral planning in Austria often caused negative effects on its development, as it focuses on one special problem and does not have an integrated view of space. The problem and failures associated with the spatial planning procedure in Austria and Iran presented briefly in figure 6:

PROBLEMS ASSOCIATED WITH SPATIAL PLANNING PROCESS IN AUSTRIA
No uniform law for land management, the competent authorities are federal as well as regional
Lack of national planning competence
Weak coordinantion of planning goals and specific legislation( in particlar between national and state level)
Lack of duty to control the coordination of authorities such as municipalities and federal states
in the same level
The planning models are insufficiently adapted to the problems of social co-ordination
generated by the absence of market prices and of the importance of private property rights in
facilitating social experimentation.
Political attitudes prevails to the tactical approach of planning
Plans and programs at state and regional level are considered less to be tasks of administration
A gap between federal, state and regional planning principles, general visions and so on
There are no grants for municipalities to support urban renewal
lack of stackholders

# PROBLEMS ASSOCIATED WITH SPATIAL PLANNING PROCESS IN IRAN lack of stackholders Poor coordination between central & local government Inconsistency in predicted city expansion Ineffectiveness of local organizations assigned to do the task of implementing the schemes Lack of 'whole-of government' planning approach for creating an understanding at national level Lack of a good source of project managerial and implementation capabilities in municipalities Lack of public participation or public objections Lack of standards, based on official regulations Delay in preparing detailed and executable plans The plans not being up to date prolongation trend of renovation and improvement plans Lack of enough detail to accomplish the plan Lack of implementation mechanisms Lack of coordination of central plan schemes with local schemes Lack of local knowledge about the content and strategic vision of the plan Lack of availability of experts and of a regular trained local employees Lack of essential technical ability in executing the project Lack of support to make plan during the implementation stage Lack of evaluation and monitoring system Lack of sufficient knowledge, experiences, information and facilities for implementation

Figure6, problems in process of urban spatial planning

### 4.2. proposed solutions

In Vienna, the city government, municipal departments and public investiture should focus on providing comprehensive and highly integrated public services; the knowledge, operating practices and coordination used to successfully provide these services is the fundamental asset for a modern city. The general problems in both countries would be tackled by implementation of the approaches in different scales. The solution methods can be, thinking about agglomeration development by focusing synergic on planning, (public) real estate policy, housing and transport policy. The most important issue in each program implementation is economic issue, afterwards the turnover in economic activities is the best choice to solve the economic program by attracting businesses to prime locations and creating modern mixed-use centers of activities (residential, economic, service functions). Re-organizing public service provision, especially in rural areas can be used as a strategy to prepare multi-purpose regional service instead of individual provision by small municipalities. Another solution to prevail the challenge in international and domestic levels is that the government or private sectors provide technical expertise and project management in urban planning and infrastructure and support information sharing and understanding of urban technologies both for outside clients and inside partners. The urban plans and Urban planning system has to be flexible enough to accommodate changes in facing rapid urban changes which is one of the main outstanding challenges of todays. Generally speaking, in order to have successful city in case of Urbanism for present and the future the relevant authorities should prepare all people and relevant stakeholders from public and private entities, the city administration, research institutions and business sectors for the challenges of the future and they all have to cooperate to reach the purpose.

## V. CONCLUSION

There are numerous planning systems all around the world and the form of planning regarding to societies and their governance systems diverges. Every country, and states, follows unique planning systems that is made up by different sponsors and planning outlooks and a particular institutional framework. They change over time, and influencing the form and the impact of spatial planning. Here the main substantial aim of all these efforts should not be forgotten which is influencing the distribution of people and activities in spaces with various scales. As mentioned Iran has unified legislations for all states of the country. There are lots of deficiencies mostly in laws executions and projects take so long time due to unwarranted red tapes. In Austria, there are nine states with nine different spatial planning laws which just in border of the states, the collaboration between them is voluntary but customary. Both countries by thinking about density development through focusing synergic on planning, public real estate policy, housing and transport policy could deep their insights of having the best urban spatial planning system.

# **REFERENCES**

- [1]. OECD organization for economic cooperation and development (2001); (p95,96), towards a new role for spatial planning, territorial economy. Paris, France. OECD.
- [2]. Madanipour.A (December 2006); Urban planning and development in Tehran, Department of Architecture, Planning and Landscape, Newcastle University, Newcastle, United Kingdom. Elsevier.
- [3]. Moeini. M (2013); Urban development processes plans. Tehran, Iran. Azarakhsh.
- [4]. worldometers (2017) Iran, retrieved from: http://www.worldometers.info/world-population/iran-population/.
- [5]. worldometers (2017) Iran, retrieved from: http://worldpopulationreview.com/world-cities/tehran-population/.
- [6]. Rasoolimanesh, S. M., Jaafar, M., & Badarulzaman, N. (2013). Urban Planning and Management System in [7]. Iran: A Review and Assessment. Middle-East Journal of Scientific Research, 18(2), 220–229. Retrieved from: http://doi.org/10.5829/idosi.mejsr.2013.18.2.12435.
- [7]. Daneshvar, M, Ghafari, A, Majedi,H (2015) Institutionalism in Strategic Structural Plans (A Grounded Theory Approach). International Journal of Architecture and Urban Development Vol.6, No.1, Winter 2016.
- [8]. Hanachi, S and Massihi, V.M. (2001) Participatory Urban Planning and Management, The Centre of Urban Planning and Architecture, MHUD, Tehran, Iran.
- [9]. worldometers (2017) Austria, retrieved from: http://www.worldometers.info/world-population/austria-population/.
- [10]. Vienna, (7<sup>th</sup> November 2017) retrieved October 2016 from: https://en.wikipedia.org/wiki/Vienna.
- [11]. Municipal and provincial archives of Vienna (Municipal Department8), retrieved from: https://www.wien.gv.at/english/history/overview/ringstrasse.html.
- [12]. Nagy, E. Nagy, G. Timár, J., Mangels, K. Schrader-Bölsche, N. Berdavs, J.; Transnational comparison of national policies and planning systems (WP3/Action 3.2.). Integrated Urban Development of Vital Historic Towns as Regional Centers in South East Europe South east Europe Transnational cooperation programme (ViTo/SEE EoI/A/169/4.1/X).
- [13]. spacial, spatial planning and energy for communities in all landscapes. Tcpa, retrieved 15 October 2016 from:http://www.special-eu.org/knowledge-pool/module-2-spatial-planning-frameworks/policies-and objectives/Austria-planning-systems Austria Planning Systems. 14-Austrian conference on spatial planning, retrieved 3th September 2016 from: www.oerok.gv.at-.
- [14]. Schremmer, C. (2010) Austrian Spatial Development Strategy in a European perspective Austrian Institute for Regional Studies and Spatial planning (ÖIR) Vienna, symposium spatial planning in the Danube region. A comparison of Serbia and Austria. Vienna.
- [15]. SUM, Stadt-Umland-Management Wien / Niederösterreich Conurbation Area Management Vienna / Lower Austria. Retrieved from: http://www.stadt-umland.at/dialog/sum-exkursion.html.

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