An Assessment of the Logical Value of Comprehensive Urban Development Plans of Tehran

Alireza Javid*
Ph.D. Student of Urban Development, Faculty of Architecture and Urban Development, University of Science and Technology, Tehran, Iran

Mostafa Behzadfar
Ph.D., Department of Urban Development, Faculty of Architecture and Urban Development, University of Science and Technology, Tehran, Iran

Received: 2018/04/11 Accepted: 2018/07/07

Abstract: Integration of assessment with planning process is one of the distinctive features of modern urban planning. In response to the need for comprehensive and integrated thinking, to evaluate and analyze complex and changing urban issues, assessment has become a basic issue in urban planning process aiming to explain the value of urban programs in terms of influencing urban development, formulate the program and implement social interventions, and improve management. Despite significant advances in theoretical approaches and evaluation methods, scientific evaluation of the status of comprehensive urban development plans has not yet been carried out in our country. It is also difficult to deal with the environmental requirements based on the recognition of the problem and to find appropriate problem solving techniques. The purpose of this research is to provide a conceptual model and to assess of comprehensive urban development plans developed for Tehran, and to explore the bases that make the evaluation of comprehensive urban planning fragile. Therefore, the available sources and theoretical literature were reviewed and the evaluation approach, criteria and sub-criteria were identified to define the evaluation framework of the stated programs. The criteria and sub-criteria were determined by analytical-comparative methodology, with library studies and expert opinions. Then it was localized and adapted to meet the ground conditions of Iran through deep interviews with experts. Finally, the significance and application of each criteria and sub-criteria was evaluated using the questionnaire by the main custodians of comprehensive urban development programs in Tehran. The results of the evaluation in this research are based on the fact that the comprehensive urban development plans prepared for Tehran have a low logical value. In addition, the answer to the complexity problem is the main problem and the most important evaluation problem.

Keywords: Assessment, Logical Value, Comprehensive Urban Development Plans, City of Tehran

JEL Classification: D04, J17, Q01, N95

* Corresponding author: A_r_javid@yahoo.com
1- Introduction

The establishment of Plan Organization in 1948 is the starting point for the evolution of urban planning and, consequently, the need to assess the development plan in Iran. Since then, the idea of comprehensive planning in Iran has been implemented and the comprehensive planning theory has been used as a formal and legal point of view. Following the development and implementation of the first comprehensive and detailed plans in Iran from the very early years, some of their issues and their shortcomings were revealed to the officials and led to criticisms that still persist and continue to be used to this date and it has allocated some resources to itself. The history of planned government and municipality involvement in the city of Tehran has been accompanied by the development of three comprehensive urban planning plans for city development management. The first comprehensive program of Tehran, which began with the Truman-Assistance Projects to less developed countries to curb the influence of communism, dates back to development in Iran between two world wars in 1960s. Formation, arrangement and implementation of the comprehensive program of Tehran (approved in 1970) coincide with the development of the metropolis of the capital (1961-1978) and the dispersion of cities and towns around it at the same time. Subsequently, in the post-revolutionary period, the program of organizing in 1992 and Tehran City Settlement Program (adopted in 2002) came up against the end of the imposed war, massive population density, urban inefficient structures, and service shortages. In the mid-2000s, the theoretical and content critique that came into the comprehensive urban plans was the focus of strategic planning thinking and implementation in the preparation of Tehran’s strategic structural program (plan). The new comprehensive program document of Tehran was approved in 2007 and presented a new model of planning in the country with a valuable position. Despite more than a decade of implementation of the recent program, it seems that environmental requirements and urban development quality are not well-established (HadiZenoz, 2016).

Reviewing urban detailed development plans, some researchers have investigated their failures and some others have put the performance assessment of urban management over the past years on the agenda. These scattered and thematic studies have not been evaluated in a comprehensively and scientifically and they have not resulted in urban policing to guide the future plans of the city. From the second half of the twentieth century, the focus of urban planning theories has gradually been directed towards the planning process. Given that the evolution of urban planning reflects the major theoretical in changing the approach from program to process, evaluation has become an important part of the planning document that includes all stages before, during, and after implementation. To evaluate, it is planned and the program is evaluated continuously to be reasonable. In other words, they are the basis for future decisions and are well-established in the decision-making processes. Considering the comprehensive urban development plans of Iran and, consequently, the triple plans of Tehran have not been evaluated by such an approach so far, this research seeks to overcome the existing gap and define the framework for assessing the logical value of urban development programs in order to pave the way for
An Assessment of the Logical Value of Comprehensive …

researchers and planners. In this regard, the present research seeks to answer the following questions:

- What are the appropriate criteria and sub-criteria for evaluating the three comprehensive integrated urban development plans in Tehran?

- How is the assessment of logical value of triple comprehensive plans of Tehran urban development based on criteria and sub-criteria?

2- Literature Review

In the planning and evaluation literature, there are valuable studies about the relationships between planning models and their evaluation methods (Alexander & Faludi, 1989; Baer, 1997 Khakee, 1998; Faludi & Voogd, 1985). Limited research conducted in this regard confirms the importance of analyzing the assessment methods in real conditions (Alexander, 1989; Khakee, 1998). Some scholars also recognize the lack of a single approach to evaluation that is appropriate to all conditions (Rossi et al., 1999). Despite study constraints, the study of research records shows that theoretical approaches and evaluation methods have made significant advances so far. The background review confirms this view that any evaluation condition has certain features that determine the method of evaluation. In Iran, urban appraisal and evaluation methods are limited to evaluating project performance and practically evaluating the development of programs while special attention is needed to urban and regional planning assessment methods for future policies at a further level. In order to examine urban development plans, some studies have been conducted in a dispersed and subject-matter and have not been based on comprehensive and scientific evaluation.

According to a survey conducted so far, there has not been a comprehensive study that has been conducted in a systematic manner to assess the practical and content of comprehensive urban development plans. In this regard, some studies are as follow:

a) Foreign Researches

Sakieh et al., (2015) in a research entitled “Scenario-based evaluation of urban development sustainability: an integrative modeling approach to compromise between urbanization suitability index and landscape pattern” argued that while the development of urbanization based on the historical process makes more use of environmental resources and it also hurts, this urban sprawl and development have created a model for controllable urban perspective, and urban planners have been able to provide dynamism for urban areas with an understanding of the cumulative effects of urban processes in different environmental conditions.

Spilková & Vágner (2016) in a research entitled “The context of the contrasting pressures of urban planning, public and private interests in Prague” argued that the evaluation of the Prague Urban Planning Program over the past three decades has shown that exploitation of empty land and gardens in the direction of urbanization and transportation infrastructure or construction of commercial facilities have damaged the gardening of this city, and even caused physical and economic turmoil.

Lichfield et al., (2016) in a book entitled “Evaluation in the Planning Process” acknowledge that it is essential that urban design assessment methods be tailored to the need for value judgments to adapt to new conditions. Indeed, the methods of assessment in the reform process of the
analysis of cost and net economic benefits have analyzed the interests of groups affected by planning measures.

b) Iranian Researches

Ghomami (1992) in a paper “review of comprehensive urban plans” consider three areas of the dissonance of the plan with nature, the dynamic nature of the city and society, and the failure in the management of urban affairs as the reasons of comprehensive urban plans failures. dered in some projects to address the

Farivar Sadri (2014) in a book entitled “the development of Iran urban planning in the contemporary era” argue that the result of the projects is the friction of the forces and, finally, the elimination of the plan and programs from the scientific development environment of the country, and it leads to the weakness of guidance and control system of urban development.

Hadi Zenoz (2016) in an article entitled “an assessment of the feasibility of urban projects in Tehran” attributes the reason to the poor quality of urban management and governance, which is manifested in the ambiguity of the local authorities’ legal area, the inadequacy of the municipal financial system, and the lack of effectiveness, accountability, and participation in urban management.

Mansoori (2016) in a book “Review of Tehran Master Plan 2007” published critic reports related to master plan. In addition to criticizing the approach of comprehensive plans, suggestions have also been made to change the approach to strategic planning in various researches since 1990s. In this book, several researches including “Methods of Realization of Urban Development Plans” in 1999 and 2000, “An introduction to the theory and methods of urban planning” in 1997, researches done by Ministry of Road and Urban Development entitled “Framework of Review Description of Urban Planning Services” in 1979, “Revision of Definitions, Concepts and Content of Urban Development Plans” and “Structural-Strategic planning of urban development, recent global experiences and its status in Iran” published in 2006 were dealt with. In this regard, some practical measures have also been consi shortcomings noted.

Majedi (2016) in a book entitled “Theory of Urban and Regional Structural-Strategic Plans” proposed the theory of urban and regional structural-strategic plans based on two principles of efficiency in the urban system of the country on one hand, and equality or social justice on the other hand, explained the process of preparation and implementation of structural-strategic plans in three cycles for five-year intervals, and determined the main content of the second and third cycles based on a review of the design and evaluation in eight steps. In the explained process after the implementation and feedback, the plan returns to its starting point and, in the light of the new conditions, it will again process the steps as spiral.

3- Theoretical Background

One of the distinctive features of new thinking models at the beginning of the second half of the 20th century is the integration of evaluation with the planning process (Alexander, 2006). In fact, evaluation is a targeted effort to influence policy development, program design and implementation of social interventions and management improvement. Some scholars believe that evaluation is the broadest concept of politics and political activity (Rossi et al., 2003).
The term evaluation is often used to describe suggestions and express their suitability. The term is more formally used to describe the overall process of analyzing programs with multiple projects, finding their relative advantages and disadvantages, and setting out the results of these analyzes in a logical framework. This term is more formally used to introduce the overall process of analyzing programs with multiple projects, finding their relative advantages and disadvantages, and setting out the results of these analyzes in a logical framework. Assessment is something that happens at different intervals of decision making to advance the design and conclusion of planning studies. In the process of urban planning, the basis of evaluation is the measurement of the merits of various solutions (Lichfield et al., 2016). Evaluation is a method and tool for understanding the effects and outcomes of existing or potential operations, activities and programs (Shariati & Monavari, 1996). Assessment is any process that provides the desired priorities for a logical program and links the program to its overall and short-term goals. In this regard, due to the evolution of urban planning, the evaluation has been well positioned. Along with urban planning, which has undergone major changes in theory since the past, urban planning assessment approaches have also been developed. Along with urban planning, which has undergone major changes in theory since the past, urban planning assessment approaches have also been developed.

Evaluation is an important part of decision-making because decision-making is directly related to judgments about different solutions, and selection is also related to judging the value of solutions i.e. evaluation (Manough et al., 2015).

The first issue that is characterized in the analysis of the performance of planning evaluation is the gap between theory (theoretical framework) and practice. In the current critical situation, which in some countries is the subject of neglected evaluation, one of the most important aspects of this gap is the mastery of quantitative methods in practice, while in the field of research; the evaluation of qualitative approaches is preferred.

Although there are a continuous assessment at all stages of planning, in related theoretical literature, in a division according to precedence and sequence of its implementation, time-based assessment approaches are divided into three distinct types of pre-implementation evaluation, performance evaluation, and post-implementation evaluation, which are different in terms of purpose. In recent decades, through the introduction of process-oriented assessment methods, the evaluation process involves the entire planning process from the policy stage to the design and identification of implementation plans and their implementation (Oliveira & Pinho, 2010). There is no general and consensual perspective on the evolution of evaluation theory, but many authors agree that in this evolution, a change in the approach from the adaptive approach to the functional approach was taken. Planning is heavily dependent on the features of the planning area (Othengrafen, 2016). With major theoretical changes in the development of urban planning and changing the approach from program to process and explaining process-oriented evaluation methods, the adoption of a productive approach in the field of evaluation and focus on the nature of the
program and the process of planning and addressing quantitative and quantitative issues is more comprehensive. In Table 1, the types of approaches identified in the evaluation of the program are presented in accordance with the field of evaluation and its basis.

### Table 1. Types of Approaches to Program Assessment

<table>
<thead>
<tr>
<th>Type</th>
<th>Assessment context</th>
<th>Assessment Base</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benefit-Oriented</td>
<td>The nature of the program and its process</td>
<td>Are the programs worth logical due to the evaluation challenges?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Are they in the right decision-making processes?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Are they taken based on future decisions?</td>
</tr>
<tr>
<td>Performance-Oriented</td>
<td>Program process</td>
<td>Is the program based on the decision and consulted in the decision-making process?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>How is the program coordinated with other existing programs and schemes?</td>
</tr>
<tr>
<td>Adaptation-Oriented</td>
<td>Nature of the program and its result</td>
<td>Do the results of the program match its content?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Has the program been performed with a good tool?</td>
</tr>
</tbody>
</table>

A review of the opinions of various thinkers suggests that the evaluation of urban development plans faces four main problems based on the norms of task force and behaviorism, monetary and non-monetary values, the response to the complexity problem and the evaluation process.

Regarding the norms of task force and behaviorism, it should be said that for evaluation, the normative principles and basis are considered at metacognitive levels. All formal evaluation methods used in planning are based on result. In other words, they value the actions based on their results, and the only difference between them is how to express and measure those results or the expected results and effects of the project (Voogd, 2017).

According to this principle, while behavioral consequentialist value the actions that have a desirable outcome, behavioral Deontic judge actions based on their correctness and falsity, and consider actions that are desirable on their own.

It is quite common practice to plan, judge about policies and programs or evaluate projects using this standard. Each judgment that is based on the rules is one of the principles of duty (Alexander, 2006).

Attention to cultural norms and values, the adaptation of the development plan to other programs and laws, and the preference of public interest on the private sector are among the issues that their evaluation is always affected by this problem (Moroni, 2006).

Regarding the challenge of monetary and non-monetary values, it is worth noting that some assessment methods use economic approaches to interpret non-monetary values or make them unconsciously monetary value. Finding ways to integrate real, but not tangible, values into the evaluation process, future social benefits associated with public investment is a fundamental issue in evaluation processes.

In an optimal evaluation process for urban projects, the added value of providing access to the disabled (Voogd, 2017), the social benefits of reducing environmental risks (Rinaldi et al., 2017), the combination of social cohesion and quality of life (Ofek, 2017) estimation of the inherent value of cultural assets for the local identity of the host community and the implementation of the concept of sustainability for regional development (Nijkamp et al., 2013) should be evaluated along with other monetary values and economic approaches.
In the evaluation of urban development plans, another issue is problem complexity. In fact, complexity is a matter that cannot be reduced or simplified.

Several factors contribute to the complexity of the evaluation. One of them is the inherent complexity of the subject matter and the components of the evaluation process, which includes evaluation policies, programs and strategies that affect the objectives of the evaluation, the context, the actors and the parties. All of this is complicated because it consists of multiple elements, relationships, and interactions.

The second case involves all the components that are relevant to the evaluation process, such as theories, methodologies, actors, concepts, tools and methods. Another aspect of complexity in evaluation is its interdependence. Another aspect of complexity in evaluation is its interdependence. This is part of the inherent complexity; evaluation topics are social constructs that involve actors and interests that make it difficult to make general statements about their needs, goals, and values. In addition, its interdependence is a major source of complexity of the process and evaluation methods, because the legitimacy of the goal ignores completely one-sided conclusions and findings (Alexander, 2006). The third aspect of complexity that exists in planning and evaluation is uncertainty. Uncertainty in planning is inherent because no one knows about the future. A kind of assessment that is based on estimates of probable outcomes and predetermined actions is considered to be of a variety of endemic types. Uncertainty in decision-making limits the evaluator’s knowledge of the future of their actions and effects (Voogd, 2017). In the contemporary world, dynamic and accelerated technological innovations and their relationship with demographic and cultural changes increase uncertainty. The problem of dealing with the uncertainty and complexity that is defined as a problem in decision making due to information constraints also limits rationality and weakens effective planning and evaluation (Ofek, 2017).

Another issue is the assessment of urban projects related to the evaluation structure and process. The tangible need to respond to the growing complexity of the subject matter of the evaluation, the fields and issues poses new challenges to the planners. Specifically, reflecting on how to form evaluations means what methods to be used and in what kind of integrated framework, and how to manage the evaluation process to make effective decisions that lead to the necessary consensus to implement them, create multiple problems. Dealing with issues related to organizational design in investment planning assessment has been less advocated in the development of theory and methodological innovation and more attention to the development, testing, and application of integrated assessment processes in organizational areas. Accordingly, the main challenge is to build assessment frameworks that respond to complexity, provide the necessary transparency for communication and make effective interaction possible (Alexander, 2006).

4- Research Method

In this research, firstly, a review of the theoretical literature on the importance of planning the evaluation in urban development plans through descriptive-analytical method was done. Then, in
order to define the evaluation framework in the research and to determine the criteria and sub criteria of evaluation, the most important criteria and sub-criteria have been determined. In order to adapt to the conditions in Iran, deep interview has been used with planners. Selected people are urban managers, consulting engineers, university professors and city council representatives, who are experienced and knowledgeable about comprehensive urban development plans. The method of selecting these experts was based on targeted sampling and 24 experts were selected to conduct the interview. The results of the interview were used for the completion and localization of the criteria and indicators.

After collecting and analyzing data from the viewpoint of 24 contributing experts and obtaining appropriate criteria and sub-criteria to evaluate urban development programs, a researcher-made questionnaire including 50 questions in five-point Likert scale was developed and distributed among 100 experts in this field. The research is three comprehensive urban development programs in Tehran that have been the development tools of Tehran since 1968.

The selected approach to evaluation in this research is a benefit-oriented approach since it both focuses on the implementation of the program and considers the program as a policy for future planning decisions, and it also addresses the program entity. In this research, it is assessed whether the comprehensive triple plans of Tehran’s urban development are worthy of logical value. In other words, whether they are right in the decision-making process or based on for future decisions. What are the main challenges in evaluating programs? In this regard, Table 2 introduces the basics of evaluation of the comprehensive triple urban development plans of Tehran.

<table>
<thead>
<tr>
<th>Assessment method</th>
<th>Approach</th>
<th>Evaluation base</th>
</tr>
</thead>
<tbody>
<tr>
<td>Process-oriented</td>
<td>Benefit-oriented</td>
<td></td>
</tr>
<tr>
<td>(program-process-results)</td>
<td>(focused on entity and process)</td>
<td>Are the programs worth logical due to the evaluation challenges?</td>
</tr>
</tbody>
</table>

In this research, after ensuring the normal distribution of the data through the Kolmogorov-Smirnov test, one-way t-test and ANOVA were used to analyze the data from the questionnaire according to the continuous scale and the distance between the data.

5- Results

To answer the first question, “what are the criteria and sub-criteria for assessing the three comprehensive urban development plans of Tehran?”, first the most important criteria were determined and corresponded sub criteria were classified by reviewing the ideas of different scholars including Alexander (2006), Berke et al., (2006), Oliveira & Pinho (2010), Khaki (2003), Khakee (2003), and Barbanente & Khakee, by using analytical-comparative method. Then, in order to localize the sub-criteria according to Iran’s conditions, the views of the analysts who influence the process in Iran were studied. In this regard, in-depth interviews were conducted with 24
experts (urban managers, directors of consulting engineers, university professors and city council members). Finally, by summarizing the stated points, the framework for evaluating the research was defined in accordance with Fig 1.

The main feature of this framework is to classify the criteria and sub-criteria of evaluation in accordance with each of the main areas of the challenge of evaluation, and utilize the beneficial evaluation approach.

Fig1. Framework of criteria and sub-criteria for evaluation of comprehensive urban development plans of Tehran
According to the results of interviews analysis (Fig 1), 16 main criteria and 37 sub-criteria for evaluating comprehensive plans of urban development in Tehran have been considered that is the basis of the questionnaire including 50 items.

To answer the second question, “How is the evaluation of the rational value of triple comprehensive plans of Tehran’s urban development based on criteria and sub-criteria?” a single-t test was used.

To this end, this assessment has been carried out in four areas of task-oriented and behaviorism norms, monetary and non-monetary values, the response to complexity and the planning process. Considering the amount of t obtained, it can be argued that there is a significant difference at the level of α = 0.01 between the theoretical mean and experimental mean. Therefore, considering that the experimental mean is below the theoretical mean, from the point of view of the experts of the Urban Development Plans, the rate of achievement of the criteria for research in all three comprehensive urban development programs of Tehran has been evaluated below the average (Tables 3 to 6).

Table 3. Evaluation of Tehran’s triple Comprehensive Plans in the Field of Tasks and Behavioral Norms from Experts’ View

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Mean</th>
<th>SD</th>
<th>Df</th>
<th>t</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>The priority of public interests on private interests</td>
<td>2.35</td>
<td>0.478</td>
<td>-12.685</td>
<td>0.000</td>
<td></td>
</tr>
<tr>
<td>Adherence to other programs and rules</td>
<td>2.63</td>
<td>0.304</td>
<td>-8.785</td>
<td>0.000</td>
<td></td>
</tr>
<tr>
<td>Attention to cultural norms and values</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>2.50</td>
<td>0.091</td>
<td>-54.673</td>
<td>0.000</td>
<td></td>
</tr>
</tbody>
</table>

Table 4. Evaluation of Tehran’s triple Comprehensive Plans in the Field of Monetary and Non-Monetary Values from Experts’ View

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Mean</th>
<th>SD</th>
<th>Df</th>
<th>t</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Improving the quality of life</td>
<td>2.38</td>
<td>0.488</td>
<td>-12.709</td>
<td>0.000</td>
<td></td>
</tr>
<tr>
<td>Sustainable development</td>
<td>2.56</td>
<td>0.498</td>
<td>-8.820</td>
<td>0.000</td>
<td></td>
</tr>
<tr>
<td>Preservation and promotion of economic-cultural assets</td>
<td>2.85</td>
<td>0.361</td>
<td>-4.068</td>
<td>0.000</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>2.65</td>
<td>0.092</td>
<td>-43.874</td>
<td>0.000</td>
<td></td>
</tr>
</tbody>
</table>

Table 5. Evaluation of Tehran’s triple Comprehensive Plans in the Field of Response to Complexity Issue from Experts’ View

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Mean</th>
<th>SD</th>
<th>Df</th>
<th>t</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flexibility</td>
<td>2.12</td>
<td>0.326</td>
<td>-26.944</td>
<td>0.000</td>
<td></td>
</tr>
<tr>
<td>Uncertainty</td>
<td>2.03</td>
<td>0.171</td>
<td>-56.577</td>
<td>0.000</td>
<td></td>
</tr>
<tr>
<td>Contextual features</td>
<td>2.45</td>
<td>0.557</td>
<td>-9.869</td>
<td>0.000</td>
<td></td>
</tr>
<tr>
<td>Institutional and structural features</td>
<td>2.37</td>
<td>0.544</td>
<td>-11.578</td>
<td>0.000</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>2.30</td>
<td>0.126</td>
<td>-46.799</td>
<td>0.000</td>
<td></td>
</tr>
</tbody>
</table>

Table 6. Evaluation of Tehran’s triple Comprehensive Plans in the Field of Planning Process from Experts’ View

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Mean</th>
<th>SD</th>
<th>Df</th>
<th>t</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Designing Organizational Structure in Planning</td>
<td>2.49</td>
<td>0.502</td>
<td>-10.151</td>
<td>0.000</td>
<td></td>
</tr>
<tr>
<td>Collaborative approaches</td>
<td>2.07</td>
<td>0.408</td>
<td>-22.773</td>
<td>0.000</td>
<td></td>
</tr>
<tr>
<td>Transparency in communications</td>
<td>2.43</td>
<td>0.497</td>
<td>-11.456</td>
<td>0.000</td>
<td></td>
</tr>
<tr>
<td>Transparency in information</td>
<td>2.10</td>
<td>0.362</td>
<td>-24.836</td>
<td>0.000</td>
<td></td>
</tr>
<tr>
<td>Effective interaction</td>
<td>2.41</td>
<td>0.497</td>
<td>-11.936</td>
<td>0.000</td>
<td></td>
</tr>
<tr>
<td>Schedule application</td>
<td>2.03</td>
<td>0.171</td>
<td>-36.577</td>
<td>0.000</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>2.43</td>
<td>0.115</td>
<td>-40.928</td>
<td>0.000</td>
<td></td>
</tr>
</tbody>
</table>
One-way ANOVA was used to prioritize the main areas of the challenge in assessing comprehensive urban development plans, i.e., identifying the domains that had the most challenge in assessing from the experts’ point of view. Regarding the amount of F obtained, it can be argued that there is a significant difference in the level of \( P < 0.01 \) regarding the evaluation areas. In this regard, the test results indicate that the main challenge in assessing Tehran’s urban development plans is to answer the complexity issue (Table 7).

<table>
<thead>
<tr>
<th>Areas of Evaluation of the Three Comprehensive Urban Development Plan of Tehran</th>
<th>Rank/Average</th>
<th>F</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Response to complexity issue</td>
<td>2.30 (1)</td>
<td>26.881</td>
<td>0.000</td>
</tr>
<tr>
<td>Lanning process</td>
<td>2.43 (2)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Task-oriented and behaviorism norms</td>
<td>2.50 (3)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Monetary and Non-Monetary Values</td>
<td>2.65 (4)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

6- Conclusion and Discussion

The results of the evaluation indicate that Tehran’s three comprehensive plans, based on the criteria and sub-criteria specified in the study are less than moderate in terms of implementation and application. In other words, the evaluation of a wide and diverse range of criteria and sub-criteria indicates that the status of the programs is not desirable as the basis for future decisions as well as the product of the correct decision-making processes. In fact, the problems facing urban planners are the lack of satisfactory implementation of comprehensive urban plans and the achievement of the goals specified therein. Comprehensive urban plans, which are made at considerable cost, have caused physical, economic, and financial disturbances with problems in practice
and inadequate assessments at the right time.

The results showed that the answer to the problem of complexity is the main problem and the most important challenge in the evaluation.

To maximize the use of evaluation processes, the evaluation mechanism should be part of the planning document. From the beginning of the process of defining the city development plan, it is necessary to plan for their evaluation.

In this regard, the design of the organizational structure in the planning of evaluation, the adoption of interactive and participatory approaches (between the stakeholders and even between the evaluator team and planners), adaptation of planning theory with the evaluation method, flexibility in the program and method of evaluation, transparency in information and communication can reduce the evaluation challenges. Obviously, the use of evaluation knowledge is, in practice, very complex and difficult, and it requires some kind of comprehensive review, relativism, and interdisciplinary attitude.

7- References


