

Forecasting of Improving Commission Performance Article 100 by Providing an Integrated Model, Scenario -SWOT- QSPM Case Study: Yazd City

Ayoub Manouchehri Miandoab ¹

Assistant Professor in Geography and Urban Planning, Urmia University, Urmia, Iran

Hassan Hekmatnya

Associate Professor in Geography and Urban Planning, Payam Noor University, Iran

Mirnajaf Mousavi

Professor in Geography and Urban Planning, Urmia University, Urmia, Iran

Received: 27 May 2019

Accepted: 16 February 2020

Extended Abstract

1. Introduction

Data related to construction violations in Yazd city represents an increase in construction violations in recent years. Briefly, it can be said that the violation of construction has a very wide range of causes and many factors play roles. Therefore, it is necessary to identify the causes and factors affecting the creation of construction violations and to formulate the appropriate solutions for its reduction. The purpose of this study is to provide the improvement strategies of performance the Article 100 in Yazd city with the use of SWOT-QSPM scenario-method. For this purpose, first, the key factors were identified using the Micmac software. In the next step, using the combination of scenario planning and strategic planning, strategies for improving the performance of Article 100 have been proposed.

2. Review of the Literature

Urban laws and regulations can be considered as the most important point of connection between urban management and citizens. Undoubtedly construction criteria play an important role in achieving the goals of urban planning, health, well-being, beauty, relaxation, safety and security. Observing the construction criteria while

Achieving goals, will improve the quality of buildings and will increase the useful life of buildings. Compliance with urban construction criteria and regulations is essential to guarantee the quality of life in the city and in urban buildings and to respect the justice and the public interest. In Iranian cities, violation of urban construction from quality, technical and urban planning criteria and standards is a rooted and widespread reality that is increasing exponentially along with the growth of urbanization and rising demand in the construction industry that along with the growth of urbanization and the increase in effective demand in the construction industry, it is increasing exponentially. The building breakthrough law has become more objective in all cities facing spatial limitation.

3. Method

The purpose of the research is practical and its type is descriptive -analytical. The data needed to understand the status quo is derived by library and documentary methods. Therefore, with the knowledge of the status of commission of Article 100 and the status of its opinions on the sustainable development of Yazd, we examined the possible scenarios of the performance of Article 100 and developing strategies for improving the performance of the Article . At first, using the Micmac software, 15 factors were selected as key influencing

1. Corresponding author- Email :a.manouchehri@urmia.ac.ir

factors in Article 100 Commission. In the second stage, using Scenario Wizard Software, possible optimal scenarios were extracted. In the next step, using the SWOT and QSPM models, strategies for improving the performance of the Article 100 Commission were developed.

4. Results and Discussion

Future possible scenarios were extracted using the scenario Wizard software, which ten scenarios were selected with very strong adaptation. The results show that the best situation is scenario 4. The percentage of utility scenario 4 is 57. This means that if in the best scenario, the performance of article 100 is realized, there is still a long way to ideal conditions. The desirability of other scenarios is less than 57 percent and it shows that in the future, many changes are needed to achieve a better performances. In contrast, the percentage of maximum critical conditions is 73% for scenario 10. That is, if tenth Scenario is realized, the performance of the 100 article will not be far from the 100th (100%) of the worst functional condition. After reviewing the scenarios, planning strategies for the performance of Article 100 Commission was prioritized. These strategies were identified based on the optimal scenario with the SWOT model and the quantitative strategic planning model. With regards to favorable scenario of Article 100 Commission, the offensive strategy (SO) was identified as the main priority and the diversification strategy (ST) as the next priority for planning. Finally, optimal scenario strategies were extracted; then the strategies and policies of each strategy are formulated to improve the performance of

the commission by implementing these strategies.

5. Conclusion

Considering that after the land reform, Yazd city has been developed fast like other cities of Iran, irregular and unplanned construction (construction violations) have risen. This process will deprive the city from the proper and efficient structure. According to statistics, approximately 1182 construction permits with an infrastructure of 35, 46 thousand square meters are offered annually in Yazd city. These results indicate that Article 100 Commission's performance will be in critical condition if the current trend continues and the role of the Article 100 Commission would be more to raise money for the municipality. The development of the city will not be in good condition socially, culturally, economically and environmentally. As a result, the quality of life of citizens will deteriorate day by day. In this research, using the proposed method, probable future scenarios of article 100 Commission were extracted. Secondly, forward-looking scenarios were compiled through forward-looking softwares (Mick Mac and the Wizard Scenario). In the third stage, the desired scenario strategies were developed using the Strategic Planning Method (SWOT) and QSPM. Finally, according to the most desirable scenario strategies, its executive policies were formulated to improve the performance of Article 100 Commission of Yazd in the future. Other city municipalities can use these strategies to improve the performance of Article 100 Commission.

Keyword: Forecasting, Commission Article 100, Scenario, SWOT, QSPM

References (In Persian)

1. Bahmani Monfred, H., & Kalantri, M. (2012). بررسی تأثیرات کمیسیون ماده صد شهرداری در کنترل تخلفات ساختمانی [Investigating the effects of Article 100 Municipal Commission in controlling construction violations]. Paper presented at *4th Conference on Urban Planning and Management*. Ferdowsi University of Mashhad, Mashhad, Iran.

2. Beheshti Roui, M. (1993). *بررسی آثار کالبدی تخلفات ساختمانی در شهرها (مطالعه موردی: تهران)*. [Investigating the physical effects of construction violations in cities (Case study: Tehran)], (Unpublished master's thesis). University of Tehran, Tehran, Iran.
3. Ebrahimi, j. (2002). *تخلفات ساختمانی و نحوه رسیدگی به آن در حقوق ایران*. [Construction violations and the way of dealing with in Iranian law]. Tehran, Iran: Mouj.
4. Masoum, J., & Aliabadi, J. (2001). *مدیریت ساخت و ساز شهری* [Urban Construction Management]. *Journal of Information Education and Research on Urban Management and Planning*, 3(33), 5-11.
5. Mohammadi, J., & Mirzaei, S. (2015). *تبیین وضعیت و شناخت عوامل موثر بر تخلفات ساختمانی در کلانشهرهای ایران، مطالعه موردی: مناطق پانزده گانه شهر اصفهان* [Explaining the status and identification of factors affecting construction violations in the Iranian Metropolis; Case study: 15 Areas of Isfahan]. *Journal of Geographical Research*, 30(2), 195-214.
6. Motamedi, M. (1989). *نظام شهر و شهرسازی در ایران با تأکید بر شهرهای جدید* [Urban system and urban planning in Iran with emphasis on new cities]. Tehran, Iran: SAMT. Muslim Ibn Aqeel neighborhood], *Municipalities Magazine*, 39, 48-54.
7. Nikpour, A., Faghih Abdollahi, M., & Seyed Alipour, S. (2015). *بررسی و تحلیل رابطه سرمایه اجتماعی و تخلفات ساختمانی (مطالعه موردی: شهروندان شهر بابلسر)* [Investigating and analyzing the relationship between social capital and construction violations (Case study: Citizens of Babolsar)]. *Journal of Sustainable City*, 2(3), 113-126.
8. Pakinejad, R. (2001). *بررسی عوامل موثر بر تخلفات در ساخت و سازهای شهری (مطالعه موردی: تبریز)*. [Investigation of Factors affecting violations in urban construction (Case study: Tabriz)], (Unpublished master's thesis). Tarbiat Modarres University, Tehran, Iran.
9. Pour Mohammadi, M., Khalil Nejad, A. (2002). *نقش و اهمیت زمین در طرح های توسعه شهری و [the Role and Importance of Land in Urban Development Plans and Mechanisms for Dealing with Construction Violations (Case Study: Tabriz City)]*. *Journal of Faculty of Humanities and Social Sciences, University of Tabriz*, 10(8),9-39.
10. Saeednia, A. (1999). *کتاب سبز - راهنمای شهرداریها، کاربری زمین شهری (جلد دوم)*. [Green book – A guide to municipalities, urban land use], vol. 2. *Tehran: Center for Urban Planning and Studies*.
11. Salehi Milani, S., & Mohammadi, M. (2010). *تدوین ضوابط و مقررات ساخت و ساز در مناطق کوهپایه ای*. [Formulation of construction rules and regulations in foothills (Case study: Bagh Shater Neighborhood of Tehran)]. *Quarterly Journal of Art*, 2(3), 97-116.
12. Sarkheyli, E., & Rafieian, M. (2010). *آسیب شناسی درآمدهای حاصل از تخلفات ساختمانی در شهرداری تهران*. [Pathology of income from construction violations in Tehran municipality]. Paper presented at *the Municipal Finance Conference*. Tehran, Iran.
13. Sarkheyli, E., Salari, M., & Safavi, S.M. (2017). *تحلیلی بر نقش تخلفات ساختمانی در ناکامی طرح های توسعه شهری کلانشهر تهران* [An analysis of the role of construction violations in the failure of urban metropolitan development plans in Tehran]. *Bagh Nazar Journal*, 14(51), 5-20.
14. Zahari, M., Pourmohammadi, M. (2006). *موانع اجرایی ضوابط شهرسازی و ارائه راهکارهای مناسب در جهت [Implement barriers to urban planning criteria and providing appropriate solutions to prevent construction violations (Case study: کلانشهر تبریز)*

Tabriz Metropolitan Area)]. *Journal of Faculty of Humanities and Social Sciences, University of Tabriz*, 5(24), 195-216.

15. Zangiabadi, A., & Rakhshanasab, H. (2007). تحلیل فضایی عوامل کمی و کیفی موثر بر ساخت و سازهای شهری در ایران [Spatial analysis of quantitative and qualitative factors affecting urban construction in Iran]. *Journal of the Iranian Geographical Association*, 5(14&15), 47-65.

References (In English)

1. Aguilar, S. (2006). *Crime prevention in the EU*, (Unpublished master's thesis). University of Örebro, Canada.
2. Alnsour, J., & Meaton, J. (2009). Factors affecting compliance with residential, standards in the city of Old Saltm, Jordan. *Habitat International*, 33, 301-309.
3. Bissler, L. (2003). *Fear of crime and social networks: A study of two local public housing complexes*, (Unpublished doctoral dissertation). North Carolina State University, Carolina.
4. Dowall, D. E. (1991). *A tale of two cities: A comparison of Karachi's informal and formal housing delivery systems*. Institute of Urban and Regional Development, University of California at Berkeley, California.
5. Farvacque, C., & McAuslan, P. (1992). *Reforming urban land policies and institutions in developing countries. urban management program*, urban management and land. Washington, DC: The world Bank.
6. Fekade, W. (2000). Deficits of formal urban land management and informal responses under rapid urban growth: An international perspective. *Habitat International*, 24(2), 127-150.
7. Few, R., Gouveia, N., Mathee, A., Harpham, T., Cohn, A., Swart, A., & Coulson, N. (2004). Informal subdivision of residential and commercial buildings in Sao Paulo and Johannesburg: living conditions and policy implications. *Habitat International*, 30(1):427-442.
8. Ioannidis, Ch., Psaltis, Ch., & Potsiou, Ch. (2009). Towards a strategy for control of suburban informal buildings, through automatic change detection. *Computers, Environment and Urban Systems Journal*, 33, 64-74.
9. Kahraman, S., Saati, A., & Misir, S. (2006). Effects of adding illegal stories to structural systems. *Sâdhanâ*, 31(5), 515-526.
10. Kahraman, S., Saati, A., & Misir, S. (2006). *Effects of adding illegal storeys to structural systems. Sâdhanâ*, 31(5), 515-526.
11. Kapoor, M., & Blanc, D. (2008). Measuring risk on investment in informal (illegal) housing: Theory and evidence from Pune, India. *Regional Science and Urban Economics* 38(4), 311-329.
12. Rukwaro, R. W. (2009). The owner occupier democracy and violation of building bylaws. *Habitat International*, 33(4), 485-498.

How to cite this article:

Manouchehri Miandoab, A., Hekmatnya, H., & Mousavi, M. (2020). Forecasting of improving commission performance article 100 by providing an integrated Model, Scenario -SWOT-QSPM Case study: Yazd city. *Journal of Geography and Urban Space Development*, 6(2), 89-108.

URL <http://jgusd.um.ac.ir/index.php/gud/article/view/80978>

ISSN: 2538-3531