



Compilation of scenarios and providing effective strategies for future social resilience (Case study: Ahwaz metropolis)

Amanpour, S^{a1}, Maleki, S^b, Safaeepour, M^c, Amiri Fahlyani, M.R^d

^a Associate Professor of Geography and Urban Planning, Shahid Chamran University, Ahwaz, Iran.

^b Professor of Geography and Urban Planning, Shahid Chamran University, Ahwaz, Iran.

^c Professor of Geography and Urban Planning, Shahid Chamran University, Ahwaz, Iran.

^d Ph.D. in Geography and Urban Planning, Shahid Chamran University, Ahwaz, Iran.

Extended Abstract

Objective: Complexity, uncertainty, drastic change, tangle, and impossibility of accurate prediction are the most important features of today's world and city of the 21st century that require a new planning approach to solving urban problems. With the rise of changes in the late second millennium and the emergence of new issues in the global community, the reliance on forecasting-based planning has failed to meet the needs of large-scale management, and the heavy shadow of uncertainty. Disconnections and the emergence of discontinuous events had changed the situation so that it was difficult to predict the future in a changing world for developers. The inability to accurately predict the future, as well as the complexity of the increasing changes, have enabled researchers to exploit the emerging knowledge potential of future research and to incorporate foresight into the planning and forecasting activities of scientific and technological developments. The proper effectiveness of today's decision-making is to understand the future and how to deal with it. Over the past five decades, future research studies have dramatically expanded our understanding of the processes and forces that shape the future that offer a range of methods and techniques that can be discovered in the form of a method. Organized, meticulous and comprehensive. To be more precise, the future situation also depends on the proper way of discovering the future. Nowadays, with traditional planning methods, including extrapolating past trends, the production of reliable medium- and long-term futures seems unlikely. Today, forward-looking approaches in the field of planning emphasize finding key factors and drivers of development in the planning space in order to allow the planner to control the future with optimal planning.

Methods: The research is applied in terms of purpose, in terms of a combination of documentary and survey methods, and in terms of nature, based on a new method of foresight, analytical and exploratory using a combination of quantitative and qualitative models. And the data collection method is also library and field. Forty-four experts from the urban area were interviewed for prospective social and institutional resilience and the results of their survey were used to identify key factors in shaping social resilience up to the horizon of Ahwaz 1407. To conduct the research, first use library resources, indicators and factors influencing resilience Social The urban communities were identified. In this regard, the validity of the research instrument was confirmed by a number of academics.

Results: The present study sought to predict and optimize the social resilience of Ahwaz metropolitan area using 34 indicators and utilize the Mikkam Predictive Studies Model and the Interaction Effect

¹ -Corresponding author at: Shahid Chamran University, Ahwaz, Iran, P.C:6135783151., E-mail address: amanpour@scu.ac.ir

Analysis, a desirable model for the future of resilience. Social and institutional provision of the Ahwaz metropolis. Therefore, indicators affecting the future of social and institutional resilience of Ahwaz metropolitan area were analyzed within a 34×34 and 34 variables matrix and then weighted (from zero to P) matrix analysis results. Interactions were calculated. Finally, by evaluating the 34 key factors mentioned above (as a result of the Matrix Analysis of Impact and Impact Matrix) with direct and indirect methods, ten key factors were identified as having the most positive and negative impact on the future status of social and institutional resilience.

Conclusion: According to the scenario table, the improvement of the income situation and the lifting of international sanctions at the macro level, as well as the focus on economic growth and development and the attention of other provinces of the country in creating employment that requires national and regional attention. To raise awareness and encourage citizens to adapt to the stresses and deployment of urban environmental systems in the worn-out urban contexts of Ahwaz, the most important issues in achieving a desirable scenario are the future research approach.

Keywords: Social Resilience, Future Studies, Scenario Planning, Strategic Planning, Ahwaz Metropolis.

Received: [March 10 2019](#) Reviewed: [July 29 2019](#) Accepted: [September 21 2019](#) Published online: [September 23 2019](#)

Citation: Amanpour et al (2019) *Compilation of scenarios and providing effective strategies for future social resilience (Case study: Ahwaz metropolis)*. *Journal of Urban Social Geograpy*, 6(2), 255-273. (In Persian)

DOI: [10.22103/JUSG.2019.2000](https://doi.org/10.22103/JUSG.2019.2000)

References:

- Ahwaz Metropolitan Statistical Office (2016). (In Persian)
- Batrouni, M., Bertaux, A. & Nicolle, Ch (2018), *Scenario analysis, from Big Data to black swan*, Computer Science Review, 28: 131–139. (In English)
- Community Regional Resilience Institute (2013), Retrieved October 22. From <http://www.resilientus.org/>. (In English)
- Cutter, S.L., Christina, F (2008). *Temporal and spatial changes in social vulnerability to natural hazards*. Proceedings US National Academy of Sciences, 105(7): 2301-2323. (In English)
- Godschalk, D.R (2003), *Urban Hazard Mitigation: Creating Resilient Cities*, Natural Hazards Review, No.4(3), pp.136-143. (In English)
- Goodwin. P., Wright, G (2001). *Enhancing strategy evaluation in scenario planning: a role for decision analysis*. Journal of management studies, 38(1), 1-16. (In English)
- Holing, C. S (1973). *Resilience and stability of ecological systems*’, Annual Review of Ecology and Systematics, 4: 1-23. (In English)
- Johan, K., Miner, W. Geddes, S (2012). *Building urban resilience: principles, tools, and practice*, The world Bank, .155p. (In English)
- Joukar, S (2011). *Patterns of shopping malls and commercial complexes in Ahwaz*. MSc, Department of Geography and Urban Planning, Shahid Chamran University of Ahwaz. (In Persian)

- Khazaei, S (2014). *Investigating Challenges and Future Research Strategies in Iran. In Proceedings of the Proceedings and Lectures on Future Research*, Science and Technology Studies Center of the Academy of Sciences, Isfahan, Index Publisher, pp.236-258. *(In Persian)*
- León, J., March, A (2014). *Urban morphology as a tool for supporting tsunami rapid resilience: A case study of Talcahuano, Chile*. Habitat International. Vol.43, pp.250–262. *(In English)*
- Mohammadpour, M., Ebrahimzadeh, I., Rafieian, M., Saad Choshi, R (2016). *Identifying and Analyzing the Interactions of Key Factors and Measuring Regional Sustainability with a Strategic Forecasting Approach (Case Study: North Khorasan Province)*. Geography and Sustainability, No.20. *(In Persian)*
- Naimi, K., Pourmohammadi, M.R (2016). *Identification of key factors affecting the future status of the suburbs of Sanandaj with emphasis on future research use*. Urban Studies Quarterly, No.53, pp:53-64*(In Persian)*
- Nygren, N.A (2019). *Scenario workshops as a tool for participatory planning in a case of lake management*. Futures, <https://doi.org/10.1016/j.futures.2018.10.004>. *(In English)*
- O'Brien, K., Sygna L., Haugen, J.E (2004). *Vulnerable or Resilient? A Multi-Scale Assessment of Climate Impacts and Vulnerability in Norway*. Climatic change, 64(1-2), 193-225. *(In English)*
- Rabbani, T (2012). *Application of Future Research Approach and Strategic Thinking in Urban Development Planning*. Master's Degree in Geography and Urban Planning, University of Tehran, Supervisor: Karamatollah ziari. *(In Persian)*
- Ranjbar, M., Eshraghi., M, Iranmanesh, Gh (2007). *Providing a spatial database model to locate temporary settlements of earthquake-affected populations*. The first conference on natural disasters. Technical University of Tehran. *(In Persian)*
- Safaiipour, M., Alizadeh, H (2016). *Fuzzy Analysis of Factors Affecting Urban Development Capacity Assessment Case Study: Ghaffar Basin*. Journal of Geography and Planning, Twentieth Year, No.56. *(In Persian)*
- Shearer, A.W (2005). *Approaching scenario-based studies: three perceptions about the future and considerations for landscape planning*. Environment and planning B: Planning and design, 32, 67-87. *(In English)*
- Statistical Center of Iran (2011). *Population and Housing Census Results*. *(In Persian)*
- Strategic Development Plan of Ahvaz (2011). *Needs analysis and forecasting and employment at city and district level*. *(In Persian)*
- Tierney, K., Bruneau, M (2007). *Conceptualizing and Measuring Resilience: A Key to Disaster Loss Reduction*. TR News, 250: 14-17. Available online: http://onlinepubs.trb.org/onlinepubs/trnews/trnews250_p14-17.pdf. *(In English)*
- Turner II, B.L (2010). *Vulnerability and Resilience: Coalescing or Paralleling Approaches for Sustainability Science?* Global Environmental Change, Article in Press, G Model JGEC-789. *(In English)*