

Evaluating and Rating the Quality of Life in Mazandran Province Using SAW and AHP Techniques

Saeed Maleki

Associate Professor of Geography and Urban Planning, Shahid Chamran University of Ahvaz, Ahvaz, Iran

Masoud Modanlou Jouybari¹

PhD Candidate in Geography and Urban Planning, Shahid Chamran University of Ahvaz, Ahvaz, Iran

Received: 25 November 2015

Accepted: 9 April 2016

Extended Abstract

1. Introduction

Quality of life is not a novel concept and denotes various meanings in varied domains. Generally, quality of life can be measured using objective and subjective indicators in various aspects. These aspects can subsume such fields as nutritional, educational, hygiene, security and leisure time. On the other hand, nowadays in development planning literature, the issue of quality of life is constantly being considered, by development planners and managers, as a basic principle.

2. Theoretical Framework

Quality of life is not a novel concept. Geographers have always been trying to optimize the mutual relationship between man and nature in order to improve his life. The concept of quality of life denotes various meanings in varied domains. Urban quality of life can be calculated in terms of a person, a family, or a society. According to World Health Organization (WHO), quality of life is people's perception of their status in life in terms of culture, value systems in which they live, goals, expectations, norms, and priorities. In 2005, The Economist Intelligence Unit (EIU) mentioned 9 factors in their studies of quality of life: 1. material

wellbeing, 2. health, 3. political stability and security, 4. family life, 5. community life, 6. climate and geography, 7. job security, 8. political freedom, and 9. gender equality.

Two types of indicators for evaluating urban quality of life have been more agreed upon by experts. First are objective indicators, referring to tangible aspects of urban life such as: number of hospitals in a city, unemployment rate, crime rate, and green spaces. Second group of indicators are subjective ones which can be measured qualitatively and include such factors as: citizen's degree of satisfaction with health services, employment opportunities, security, and accessibility of green spaces. In the first approach, secondary data are used for developing the indicators and, to a large degree, it hinges upon the statistics gathered from the city in question in various years. In the second approach, using subjective indicators instead of secondary data, citizen's opinions are directly analyzed and their degree of satisfaction is evaluated from various aspects.

3. Methodology

The present study is a developmental-practical one and was conducted using a combination of descriptive, documentary, and analytical methods. The collected data on 14 indicators for the cities of Mazandaran province has been selected for this study.

1. Corresponding Author: modanlou3107@yahoo.com

The indicators included: population density, ratio of divorce to the total number of marriages, unemployment rate, literacy rate, electricity, water, gas and telephone users' ratio to the total population, the ratio of urban population to the entire population, number of murder and involuntary manslaughter lawsuits, number of residential houses built using steel structure, number of residential houses built using concrete, province's Gross Domestic Product (GDP), and life expectancy. For weighing the indicators, Analytic Hierarchy Process (AHP) and for evaluating the quality of urban life multi-attribute decision making through Simple Additive Weighing (SAW) were used. The important point in decision-making indices of these models is that positive and negative indicators are used simultaneously in the matrix. In order to make various measuring indicators comparable, normalization was used to make indices dimensionless and additive.

4. Findings and Discussion

The findings reveal that Sari County is in the first place, Amol in the second place, Babol in the third place, and counties of Juybar, Savadkuh, and Galugah, with a huge gap, occupy the bottom of the list regarding the urban quality of life in Mazandaran province. The huge gap in quality of life among the urban districts of this province is a testament to the great inequality in accessibility and concentration of facilities and urban services in some counties along with the lack of urban facilities and inattention of authorities in some smaller counties of Mazandaran province.

References (In Persian)

1. Asgharpour, M. J. (2006). *Multiple-criteria decision making*. Tehran, Iran: University of Tehran Press.
2. Azar, A., & Rajabzadeh, A. (2008). *Applied decision making*. Tehran, Iran: Negah Danesh.
3. Bari, N. (2001). *Social welfare* (S. A. Mirhosseini & S. M. Nourbakhsh, Trans.). Tehran, Iran: SAMT.
4. Basakha, M., Agheli Kohneh Shahri, L., & Masaeli, A. (2010). Ranking the life quality index in Iran's provinces. *Social Welfare Quarterly*, 9(37), 98-102.

5. Conclusion and Suggestions

Urban quality of life is a new concept and an interdisciplinary, multidimensional science which, by the prevalence of urbanism in the 20th century and its aftermath in various fields, gradually took shape under the influence of various theories, movements, and schools of thought. Finding indicators, combining indices of assessment, and evaluating changes in urban quality of life are the most important issues concerning quality of life. While subjective indicators are figures and statistics regarding real conditions of citizens' lives; objective indicators, on the other hand, deal with citizens' mental, psychological perceptions, and their degree of satisfaction with urban life. The findings reveal that, regarding the disproportionate rates of urban quality of life in counties of Mazandaran province and for the purpose of moving towards integrated urban management, considering the inextricable role of sustainable development in resolution of problems facing human society and bringing welfare and comfort, correct and comprehensive planning, for decentralizing urban facilities and services together with orienting development plans towards economic evolution and creation of new job opportunities should be considered.

Keywords: Urban quality of life, Multi-attribute decision-making, SAW, Mazandaran Province

5. Faraji Mollaei, A., Azimi, A., & Ziari, K. (2010). Analysis of the quality of life in urban areas of Iran. *Journal of Research and Urban Planning*, 1(2), 1-16.
6. Ghafari, Gh. R., & Omid, R. (2008). Life quality in Iran's civil and developmental programs. *Social Welfare Quarterly*, 8(30), 24-28.
7. Ghalibaf, M. B., Roustai, M., Ramezanzadeh Lasbouie, M., & Taheri, M. (2011). The evaluation of urban life quality (A case study: The Yaftabad neighborhood). *Geography*, 9(31), 33-53.
8. Jajarmi, K., & Kalteh, E. (2006). Assessment of the quality of urban life from citizens' perspectives. Case Study: Gonbad Kaboos. *Journal of Geography and Development*, 4(8), 5-18.
9. Lotfi, S. (2009). The concept of urban life quality: Definitions, dimensions and its evaluation in urban planning. *Human Geography Research Quarterly*, 1(4), 65-80.
10. Mahboub, S., & Ghashghai, A. (2009). A ranking of world public libraries based on quantitative performance indices using the MADM approach and the SAW model. *Research on Information Science & Public Libraries*, 3(57), 33-48.
11. Mohammadi, J., Zanganeh, M., & Abdoli, A. (2010). The evaluation of life quality from the perspective of citizens of Mashhad. *Urban Management Studies*, 2(3), 97-117.
12. Pourjafar, M. R., Kokabi, A., & Taghvai, A. A. (2005). Life quality planning in central cities: Definitions and indices. *Journal of Urban Development Discussions*, 6(12), 6-13.
13. Pourtaheri, M. (2010). *The application of multiple-attribute decision-making approaches in geography*. Tehran, Iran: SAMT.
14. Pourtaheri, M., Eftekhari, A. A., & Vafahi, A. (2011). The evaluation of life quality in rural areas (A case study: The Khavah-ye Shomali rural district, Lorestan). *Human Geography Research Quarterly*, 13(76), 13-31.
15. Rezvani, M. R., Motakan, A. A., Mansourian, H., & Satari, M. H. (2009). Development and evaluation of urban life quality indices (A case study: Noorabad, Lorestan). *Journal of Urban-Regional Studies and Research*, 1(2), 87-110.
16. Seyfadini, F. (2002). *A dictionary of urban and regional planning*. Shiraz, Iran: Shiraz University Press.
17. Shokouhi, H. (2004). *New thoughts in philosophy of geography*. Tehran, Iran: Gitashenasi.
18. The Statistical Centre of Iran. (2010). *A selection of Iran's economic, social, cultural indices and indicators. The statistical yearbook of Mazandaran province*. Tehran, Iran: Plan and Budget Organization, Center for Statistics
19. The Statistical Centre of Iran. (2011). *Population and housing census. The statistical yearbook of Mazandaran Province*. Tehran, Iran: Plan and Budget Organization, Center for Statistics
20. Vazifedoust, H., & Amini, M. (2009). Investigating urban life quality indices in Tehran from the perspective of managers and experts of urban management. *Urban Management Studies*, 1(3), 1-18.

References (In English)

1. Amérgo, M., & Aragones, J. I. (1997). A theoretical and methodological approach to the study of residential satisfaction. *Journal of Environmental Psychology*, 17(1), 47-57.
2. Balsas, C. (2004). Measuring the livability of an urban center: An exploratory study of key performance indicators. *Planning, Practice and Research*, 19(1), 101-110.
3. Bonomi, A. E., Patrick, D. L., Bushnell, D. M., & Martin, M. (2000). Validation of the United States' version of the World Health Organization Quality of Life (WHOQOL) instrument. *Journal of Clinical Epidemiology*, 53(1), 1-12.

4. Nilsson, J., Rana, A. M., & Kabir, Z. N. (2006). Social capital and quality of life in old age results from a cross-sectional study in rural Bangladesh. *Journal of Aging and Health*, 18(3), 419-434.
5. Shin, M., Kim, D. S., & Lee, J. W. (2003). Deposition of inertia-dominated particles inside a turbulent boundary layer. *International Journal of Multiphase Flow*, 29(6), 893-926.

How to cite this article:

Maleki, S., & Modanlou Jouybari, M. (2016). Evaluating and rating the quality of life in Mazandran province using SAW and AHP techniques. *Journal of Geography and Urban Space Development*, 3(1), 133-147.

URL <http://jgusd.um.ac.ir/index.php/gud/article/view/41702>

ISSN: 2322-2832