# Assessment and Evaluation of Quality of Life in Urban Areas of Iran Case Study of Saravan

Majid Karimzadeh,

Department of Economics, Higher Education Complex of Saravan, Saravan, Iran Karimzadeh111@yahoo.com Amanollah Tamandehro (Corresponding author) Faculty of Literature and Humanities, University of Velayat, Iranshahr, Iran a.tamandehro@velayat.ac.ir

# تقدير وتقييم جودة الحياة في المناطق الحضرية في إيران

دراسة حالة سارافان

مجيد كريم زاده قسم الاقتصاد، مجمع التعليم العالي في سارافان، سارافان، إيران أمان اللّه تامان ديرو(المؤلف المسؤول) كلية الآداب والعلوم الإنسانية، جامعة ولاية إيرانشهر، إيران

## <u>Abstract:-</u>

(62) .....

Quality of life is a complex Quality-of-life phenomenon. studies are extremely helpful for the planning and implementation of public policies. These studies can help to improve life quality by recognizing the problems, and causes of them. The current study will investigate the people's perceptions about their quality of life in the Saravan region in the South East Irani province of Sistan and Baluchistan. Sistan and Baluchistan is one of the largest provinces of Iran. The main findings of the study show that 7.1 percent of people in Saravan are satisfied with the level of their quality of life and dissatisfied. 68 percent are Moreover, people in Saravan are more satisfied with the quality of social infrastructure and solidarity dimensions and less satisfied with the economic and leisure dimensions of life quality. The result also reveals that there is a gap between the quality of life of people who live near the city center and more affluent areas of Saravan than those who live far from the city center.

<u>Keywords:</u> Sistan and Baluchistan; Saravan; Life Quality; Development; Planners. الملخص:\_

إن نوعية الحياة ظاهرة معقدة، ودراسات جودة الحياة مفيدة للغاية لتخطيط وتنفيذ السياسات العامة، لذلك يكن أن تساعد هذه الدراسات في تحسبن نوعية الحياة من خلال التعرف على المشاكل وأسبابها، سوف تبحث الدراسة الحالية في تصورات النياس حول نوعية حياتهم في منطقة سارافان في مقاطعة سيستان وبلوشستان جنوب شرق إيران، سيستان وبلوشستان هي واحدة من أكبر مقاطعات إيران، وتظهر النتائج الرئيسية للدراسة أن ٧.١ في المائية من النياس في سارافان راضون عن مستوى جودة حياتهم و ٦٨ في المائة غير راضين، فضلاً عن أن الناس في سارافان يشعرون برضا أكبر عن جودة البنية التحتية وأبعاد التضامن الاجتماعي وأقل رضا عن الأبعاد الاقتصادية والترفيهية لجودة الحياة، تكشف نتبجة الدراسة أيضًا أن هناك فجوة بين نوعية حياة الأشخاص الذين يعيشون بالقرب من وسط المدينة والمناطق الأكثر ثراء في سارافان من أولئك الذين يعيشون بعيدًا عن وسط المدينة.

**الكلمات المفتاحية:** سيستان وبلوشستان، سارافان، جودة الحياة، تطوير، المخططين.

The Islamic University College Journal No. 77 : Part 3 March 2024 A.D \_ Ramadan 1445 A.H



## Introduction:-

The study of quality of life (QOL) is vital to any vibrant society. Quality of life studies are extremely helpful for planning and implementation of public policies. These studies can help to improve life quality by recognizing the problems and causes of them. Policy makers look for a better understanding of how efficiently to achieve a higher urban life quality in an increasingly affluent society (see Ibrahim and Chaung: 2002). Improving life quality in the individual and social scales has been considered by planners for a long time. In recent decades with priority of social development and use of it by different countries this subject has found its way in development plans and the literature as well. Since then, government efforts and attention have been shifted from the simple objective of economic growth to the well-being of society through purposely directed programs to alleviate the socioeconomic difficulties of their poor population.

Quality of life is a multidimensional phenomenon. It is also a contested term argued by various scholars. This includes aspects of social. economic. environmental. health and psychological improvement. It is associated with concepts relating to personal wellbeing, quality of life and overall well-being of society. It has found its application in a wide range of disciplines such as sociology; economics. industrial/ organizational psychology, planningmanagement, geography and public health and many others (Feneri 2013). According to Megone (1990) a significant reason for taking an interest in the life quality as in essence, the topic is closely associated with the efficient allocation of scarce resources. In fact, improvement of life quality is among the significant goals of public policy in each society.

After the World War II, Iran like many other countries started its demographic transition with the substantial and sustained reduction in mortality rate. But this policy has not been consistent or effective. Since then Iran has experienced unprecedented growth in its population from 1951 to 1981. On average Iran's population has been increasing 3 percent per annum ever since. The population of the country was less than 19 million in 1956 and it went to 82.9 million in 2019. That is a massive increase in the population by any



(64) ..... Assessment and Evaluation of Quality of Life in Urban Areas of Iran

standard. Improving health and reducing mortality rates, especially infant and child mortality, are said to be the main reasons for such a growth rate (Moshfegh and Hosseini: 2012). Population residing in urban areas in Iran, according to 1926 data, was 19.1 percent, which increased to 75.3 percent in 2019. Population growth, rural–urban migration and creation of new cities from villages are the main reason for increase in urban population of Iran.

Sistan and Baluchistan is the poorest, the most underdeveloped and isolated province of Iran. According to Iran's census held in 2011, Sistan and Baluchistan with the area of 181,785.28 sq km had a population of 2.775 million with an average annual growth rate of 1.83. The share of the province's population to the country's population is 3.37 percent with the urbanization rate of 49.0 percent and 71.6 percent literacy rate. Saravan is located in the west of Balochistan. In the 2016 census, Saravan had a population of 191661 of which 51 percent were living in urban areas and 49 percent were living in rural areas (Census 2016). The main strength of Saravan lies in its location. Saravan has 384 kilometer long border with Pakistan and also have fertile land which can be utilized for the expansion of the agricultural sector.

This paper is a case study of perception of the people about their life quality in Saravan urban areas. The paper is divided in the following parts. Firstly, we explore the related literature on the subject of our investigation. Secondly, we will formulate a conceptual model about the topic of our study. This will be the central hypothesis of this paper. In the third section we shall explain the methodology that is used in this research. Fourthly, we will discuss the results of our findings and additional explanations required for the principal objective of this paper. The last part will be the conclusion.

#### 1. Review of Literature

In order to understand the quality of life we need to explain the related literature on the subject. For this section we need to examine carefully the main scholarly works, policy reports and other related literature. The meaning of quality of life is developed in relation to reduction to the level of poverty and underutilization of human capabilities. It is seen as a part of human rights. People are said to have rights to live in reasonable good living conditions (Sumner:



2003). It is noted that quality of life cannot alone be reflected by income per capita and any increase in per capita income may cannot leads to general raise in well-being of society (Qizilbash: 1996). The life quality is an essential issue in the development and improvement of human societies. However, Kapuria (2014) argues that because of multiple dimensions of life quality in any given setting, it is very difficult to measure life quality accurately.

Here one can argue that in recent time concern has shifted towards the urban nature and urban quality of life. The increasing tendency for living in the urban areas and increase of population of these areas is one of the main incentives to expand an independent movement on urban life quality researches (see Lotfi and Solaimani: 2009). Urban areas in any country are the main centers of economic, social and political growth and have proven as the most attractive sites for creating wealth, innovation, creativity and employment but at the same time there are many negative challenges regarding to the urban development, like as poverty, social deprivation, shortage of housing, physical and environmental degradation, insecurity, unemployment and traffic congestion. These problems have drastically decreased the quality of urban life (UNFPA, 2007).

Lee (2003) in his study has compared the present condition of life quality of South Korea with other developed countries. This study on Korea concludes that education in the country is the most important factor for the developed countries and in terms of equity and work study reveals that Korea's present condition is much worse than that of the OECD countries in the late 1960s. Their study suggested that according to the past experience of the OECD countries', work conditions and gender equality must be in priority for Korea.

Ibrahim and Chung (2003) in their paper investigated the life quality of residents living near industrial estates in Singapore. They have found that studies about the life Quality are getting the attention of planners of urban areas due to its useful way to assess and monitor public policies. The results of this study showed that variables of marital status, education level, occupation, household income and household size were significantly contributed to the overall life satisfaction scores in this area and also people that are living in this area are generally satisfied with their life.



مجلة الكلية الإسلامية الجامعة العدد ٧٧ : الجزء ٣ رمضان ١٤٤٥هـ أذار ٢٠٢٤ (66) ..... Assessment and Evaluation of Quality of Life in Urban Areas of Iran

Kapuria (2014) in her study tried to estimate the quality of life of the people living in Delhi in India by fuzzy set theory. The result of the study showed that the majority of services in resettlement colonies, unauthorized colonies, and urbanized villages were poor. The overall pattern suggests that the differences in access and satisfaction were mainly influenced by location, and within each location they are influenced by economic conditions.

Rezvani et al, (2013) in their study evaluated the quality of life in urban areas of Iran (Case study of Noorabad). The results of this study showed that health conditions, housing and personal security are scored higher among the all dimensions and people are very dissatisfied with aspects such as employment opportunities, wealth and income distribution, entertainment facilities and economic condition. Lotfi and Solaimani (2009) in their paper argued different dimensions of urban life quality in Iran.

The result of their study showed that physical, environmental, social and economic dimensions of life quality scored higher among the other dimensions.

Rollero et al., (2014) investigated gender differences in the determinants of quality of life. The Results of the study indicated that on the environmental, the physical and the psychological domains of quality of life men outscore women and also in case of sense of community and self-reported health are similar for both women and men. On the contrary, social support is more predictive for women's quality of life, whereas the income level is more significant for men's quality of life.

Tesfazghi et al., (2010) evaluated urban quality of life for Kirkos sub-city of Addis Ababa. The results of the study indicated that the people in the sub-city, on average are dissatisfied with their life quality also result showed that respondents with higher income and education level are more satisfied as compare to others. Gordyachkova et al., (2018) in their study they evaluated the quality of life in arctic zone of Russia. This analysis showed negative characteristics of the quality of life of the population of the Russian Arctic.

## 2. Conceptual Model and Hypotheses

Quality of life is a multidimensional term and lacks standardized definition and form of measurement. In many studies GDP has been



ISSN 2664 - 4355 Online

مجلة الكلية الإسلامية الجامعة العدد ٧٧ : الجزء ٣ رمضان ١٤٤٥هـ - آذار ٢٠٢٤م

accounted for the key determinant and a main substitute to the quality of life measure, but in the recent studies, researchers have tried to develop a better measure which includes almost all aspects of life quality. In this study, quality of life is measured through questions about people's perception of some aspects of the quality of their daily life.

The main hypothesis of this study is to assess the quality of life in Saravan. For this purpose, we classified our hypotheses of the study in two parts:

- 1. People in poor areas of Saravan are not satisfied with their life Quality.
- 2. Quality of economic, education, health and safety, social solidarity, leisure, infrastructure, Residential Environment and environmental quality are not less than the mean value of the society.
- 3. There is a significant difference between quality of life of people living in different areas of Saravan.

### **Research Method**

A descriptive, experimental research design is employed using a combination of qualitative and quantitative research methodologies. While descriptive studies describe a given state of affairs as scientifically accurate as possible, descriptive research is carried out to describe existing conditions without analyzing the relationships between the variables. In addition, a household survey was used to collect information on their responses about quality of their wellbeing. Data were gathered by a self-reported questionnaire. All the urban households of Saravan were statistical population of the study and among them a sample size of 200 households staying around the study area has been selected. In order to collect the data, urban areas of Saravan was divided into 3 areas according to each area's socio-economic characteristics. In each neighborhood, the required data was randomly gathered via questionnaires. For reliability and internal consistency of questionnaire Cronbach's alpha test has been used. The reliability coefficient or Cronbach is 0.94 in this study. For testing the hypotheses of the study mean, standard deviation, frequency, one sample t-test and one- way ANOVA are used to examine hypotheses.



(68) ...... Assessment and Evaluation of Quality of Life in Urban Areas of Iran

#### **Result and Discussion**

In order to measure the opinions of respondents we used the 5 point Likert scale. Table 1 shows the overall level of people's responses about quality of their living in urban areas of Saravan.

Level of QOL	Percentage (%)	Cumulative Percentage
Completely satisfied	0	0
Good	7.1	7.1
Indifferent	25	32.1
Bad	40.4	72.4
Completely dissatisfied	27.6	100.0
Total	100	

Table 1. Overall Satisfaction with Quality of Life

According to table 1 when respondents were asked about their quality of life, it is observed that the percentages of completely dissatisfied and completely satisfied are 27.6 percent and 0 percent respectively. The percentage of respondents who are indifferent about their quality of life is 25 percent. In general, according to the table; 7.1 percent of the respondents in Saravan are satisfied and 40.4 percent are dissatisfied with their ongoing quality of life.

Domain	Mean	Standard Deviation
Economic	15.10	4.61
Quality of Education	19.28	5.20
Quality of Health And Safety	24.64	4.33
Quality of Social Solidarity	35.97	6.15
Quality of Leisure	10.38	2.38
Quality of infrastructures	36.77	8.27
Quality of Residential Environment	28.98	6.55
Environmental Quality	18.11	3.78

Table 2. Satisfaction with Different Dimension of Quality of Life

In order to evaluate the level of life satisfaction related to different dimensions of life quality, respondents were asked to rate their perception. As can be seen in table 2, people are more satisfied with quality of infrastructure and social solidarity dimension of life quality, however, less satisfied with the leisure and economic dimension in their area. In the domain of "Economic" (table 3), the highest level of satisfaction with a mean value of 4.26 is related to job conditions, and the lowest level of satisfaction with a mean value of 2.44 is related to household income to meet basic needs. In the domain of

The Islamic University College Journal No. 77 : Part 3 March 2024 A.D \_ Ramadan 1445 A.H



"quality of education" the highest level of satisfaction with the mean value of 4.25 is related to satisfaction from schools teaching and sport facilities. The lowest level is related to satisfaction from teacher's experience and job with a mean value of 3.09. In the domain of "quality of health and safety", the highest level of satisfaction is related to satisfaction from lack of security, in particular risks involved with night time with a mean value of 4.11 and the lowest level is related to the satisfaction from consumption of fresh food and vegetables according to local custom with a mean value of 2.87. In the social solidarity dimension, the highest level of satisfaction with a mean value of 2.95 is related to having a spirit of teamwork and the lowest level is related to intimate relationships between members of society with the mean value of 1.68. In the quality of leisure dimension, the highest level relates to satisfaction from availability of sport facilities for youths with a mean of 4.05 and the lowest level is related to the satisfaction from access to cultural and art facilities with a mean of 2.07. In the quality of infrastructures dimension, the highest level of satisfaction is related to satisfaction from Radio and TV coverage with the mean value of 4.18 and the lowest level is related to access and availability of financial services and institutions with the mean of 2.08.

In the quality of residential environment dimension, the highest level of satisfaction is related to satisfaction from access to financial institutions (bank, loan etc.) with the mean value of 4.11 and the lowest level is related to satisfaction from the size and beauty of the house with the mean value of 2.98. In environmental quality dimension, the highest level of satisfaction is related to satisfaction, from protection against flood exposure with the mean value of 3.98 and the lowest level is related to satisfaction from disposal system of surface waters in area with the mean value of 3.06.

Domain	Variable	Mean	S.D
Economic	Satisfaction from Income	2.81	1.033
	Satisfaction from annual saving	3.49	1.024
	Satisfaction from meeting one's basic	2.44	0.90
	needs		
	Satisfaction from access and availability of	4.09	0.93
	financial services		
	Satisfaction from job conditions	4.26	0.89

#### Table 3. Variables of Life Quality

The Islamic University College Journal No. 77 : Part 3 March 2024 A.D \_ Ramadan 1445 A.H



مجلة الكلية الإسلامية الجامعة العدد ٧٧ : الجزء ٣ رمضان ١٤٤٥هـ أذار ٢٠٢٤م (70) ..... Assessment and Evaluation of Quality of Life in Urban Areas of Iran

Domain	Variable	Mean	S.D
Quality of Education	Satisfaction from materials used in schools of city	3.44	0.93
	Satisfaction from heating and cooling systems in schools	3.79	0.98
	Satisfaction from material resistance against natural disasters of school	3.91	0.99
	Satisfaction from resistance of schools to fire	3.87	1.00
	Easy access to school for children	3.10	1.00
	Satisfaction from teacher's experience and job	3.09	1.05
	Satisfaction from teaching and sport facilities in Schools	4.25	0.90
Quality of health and safety	Satisfaction from consumption of fresh food and vegetables according to local custom	2.87	0.99
	Satisfaction from health care system	3.77	1.51
	Satisfaction from access to police station in emergency situation	3.93	1.15
	Satisfaction from lack of security risks at night	4.11	0.94
Quality of social solidarity	Intimate relationships among family members and neighbours	1.68	0.82
	Satisfaction from having a spirit of teamwork	2.95	1.06
	Residents participate in celebrations and mourning	2.22	1.03
	Satisfaction from consult of people when required	2.85	1.07
Quality of leisure	Satisfaction from availability of sport facilities for youth	4.05	0.95
	Visiting relatives	3.61	1.96
	Satisfaction from access to cultural and art facilities	2.07	1.09
Quality of infrastructure	Satisfaction from access to electricity, telephone and drinking water	3.61	1.27
	Satisfaction from access to transportations and communications	3.79	1.13
	Satisfaction from access to financial institutions (bank, loan etc.)	2.08	1.20
	Satisfaction from sewage disposal network	3.01	1.28
	Satisfaction from Radio and TV coverage	4.18	1.05
Quality of residential environment	Satisfaction from home's robustness against natural hazards	3.81	1.04
	Satisfaction from resistant materials of houses	3.62	1.02

The Islamic University College Journal No. 77 : Part 3 March 2024 A.D \_ Ramadan 1445 A.H



مجلة الكلية الإسلامية الجامعة العدد ٧٧ : الجزء ٣ رمضان ١٤٤٥هـ - آذار ٢٠٢٤م

Domain	Variable	Mean	S.D
	Satisfaction from the size and beauty of the house	2.98	1.13
	Satisfaction from garbage collection and disposal system	4.11	1.02
Environmental quality	Satisfaction from green area and parks	3.63	1.26
	Satisfaction from disposal system of surface waters in area	3.06	1.07
	Satisfaction from air quality	3.49	1.10
	Satisfaction from protection against flood exposure	3.98	0.96

In order to assess the dimension of quality of life and to find out which dimension is higher than the average, we have used onesample t-test. The one-sample t-test compares the mean score of a sample to a known value, usually the population mean. It allows us to test whether a sample mean significantly differs from a hypothesized value. In order to compare the mean of each dimension of quality of life based on the number of items, mean limit was considered as the basis for evaluation of quality of life. It is obvious that according to the direction of each item, scores higher than the average (mean limit) indicate better status of life quality.

Domain	T-test	Mean	Sig	Mean limit
Economic	52.81	18.1	0.000	21
Quality of Education	69.14	20.7	0.000	24
Quality of health and Safety	54.74	15.37	0.000	21
Quality of social Solidarity	42.79	22.32	0.000	21
Quality of Leisure	37.19	8.8	0.000	9
Quality of Infrastructure	40.1	32.31	0.000	33
Quality of Residential environment	35.87	22.12	0.000	24
Environmental Quality	71.17	14.52	0.000	15

Table 4. One sample T test

Table 4 shows among all dimensions of life quality the mean value of economic, quality of education, quality of health and Safety, quality of Leisure, quality of Infrastructure, quality of Residential environment and Environmental quality are less than from a hypothesized value (mean limit). Therefore, with regard to the calculated significant levels (0.000) which are less than 0.05 one can reject these hypotheses, and claim that the quality of all these



(72) ..... Assessment and Evaluation of Quality of Life in Urban Areas of Iran

dimensions are less than the mean value of society and only mean value of quality of social Solidarity is more than hypothesized value and this hypothesis can be accepted.

Table 5 and 6 describe the quality of life of people living in different rural areas of Saravan. The one-way ANOVA is used to determine whether or not there are any significant differences between the means of two or more independent groups.

	Sum of Squares	df	Mean Square	F	Significance level
Between groups Within groups	2787.947 51733.608	3 197	2280.98 262.607	8.69	0.000
Total	56295.555	200			

Grou	os/ level	Mean difference (I-J)	Std. Error	Significance level	95% confidence interval	
I	J				Lower	Upper
					bound	bound
Poor	Middle	23.838	2.35181	0.165	-	1.266
	Well off	19.549	5.94166	0.000	9.841	-9.805
					-	
					37.86	
Middle	Poor	-23.838	2.35181	0.165	-	9.841
	Well off	-4.288	5.98995	0.004	1.266	-5.403
					-	
					33.69	
Well off	Poor	-19.549	4.94166	0.000	9.805	37.868
	Middle	4.288	5.98995	0.004	5.403	33.695

#### Table 6. Multiple Comparisons (Tukey Test)

Table 5 indicates that there is a statistically significant difference between mean of different groups and means that different urban areas in Saravan (Poor, middle and well off) have different levels of quality of life. Post-hoc comparison tests (Table 6) confirmed that the mean score for poor area is considerably different from both middle and well off areas. It verifies that people living in different rural areas of the Saravan have different standard of living. People living in places



which are near the centre and well off areas have more and better access to urban facilities. Therefore, they have higher standard of living and conditions are more suitable for better quality of life.

#### **Conclusion:-**

This study is an investigation to formulate workable policies to improve quality of life for the citizens of Saravan. It is a recommendation for local authorities and citizens to engage and corporate constructively and provide facilities to improve conditions of life in Saravan. As mentioned above quality of life is a multidimensional subject of study that requires more in-depth investigation from both scholars and policy makers. The main purpose of this study is to determine the quality of life of urban areas in Saravan. To measure the overall life satisfaction level in this study, a survey was done on 200 respondents. The respondents were asked to rank their perception about life quality.

The overall life satisfaction score from the 200 respondents showed that 7.1 percent of people are satisfied and 68 percent are dissatisfied with the quality of life in Saravan. The respondents seem to be more satisfied with quality of infrastructure and social solidarity and less satisfied with economic and leisure provisions. The results also indicate that among all dimensions of life quality the mean value of quality of social solidarity is more than from the hypothesized value. The result also reveals that there is a gap between quality of life of people who live close to city centre and more affluent areas of Saravan than those who live in poorer rural areas.

#### References:-

- 1. Census, "Population and Housing Census 2016 of Islamic Republic of Iran", 2016.
- Cramer V., Torgersen. S., and Kringlen. E, "Quality of Life in a City: The Effect of Population Density", Social Indicators Research, 69(1), 2004, p: 103-116.
- Feneri. A.M., Vagiona. D., and Karanikolas. N. "Measuring Quality of Life (Qol) In Urban Environment: An Integrated Approach", 13 International Conference on Environmental Science and Technology, Athens, Greece, 2013.
- 4. Gordyachkova, O., Nikulkina, I., Rotar, T., Gritsenko, S., and Filimonova, L. "The Quality of Life of the Population of the Arctic Zone of Russia and Financial and Economic Mechanisms for Improving it from the Standpoint

The Islamic University College Journal No. 77 : Part 3 March 2024 A.D \_ Ramadan 1445 A.H



(74) ..... Assessment and Evaluation of Quality of Life in Urban Areas of Iran

of Strengthening National Interests. Journal of Advanced Research in Law and Economics, 9(8), 2019, p: 2578-2592

- Ibrahim. M. F., and Chung. S. W. "Quality of Life of Residents Living near Industrial Estates in Singapore", Social Indicators Research, 61(2), 2003, p: 203-225.
- Kapuria, P. "Quality of Life in the City of Delhi: An Assessment Based on Access to Basic Services", Social Indicators Research, 117(2), 2014, p: 459-487.
- 7. Lee, H. S. "The Quality of Korean Life in Comparative Perspective: Objective Quality of Life in Korea and the OECD Countries", Social Indicators Research, 62, 2003, p: 481-508.
- Lotfi, S., and Solaimani, K. "An assessment of Urban Quality of Life by Using Analytic Hierarchy Process Approach (Case study: Comparative Study of Quality of Life in the North of Iran)", Journal of Social Sciences, 5(2), 2009, p: 123-133
- 9. Megone, C. "The Quality of Life: Starting from Aristotle. In: Quality of Life: Perspectives and Policies", Baldwin, S., C. Godfrey and C. Propper (Eds.). Biddles, London, 1990, p: 28-41.
- 10.Moshfegh M,. and Hosseini, Gh. "Future Demographic Changes in Iran during the Period 1390 to 1420", Ma'rifat-i Farhangi Ejtemaii, 4(1), 2012, p:87-105.
- 11.Qizilbash, M. "Capabilities, well-being and human development: A survey". Journal of Development Studies, 33(2), 1996, p: 143–162.
- Rezvani, M. R., Mansourian H., and Sattari, M. H. "Evaluating Quality of Life in Urban Areas (Case Study: Noorabad City, Iran)", Social Indicators Research, 112, 2013, p:203–220.
- Rollero, CH., Gattino, S., and De Piccoli, N. "A Gender Lens on Quality of Life: The Role of Sense of Community, Perceived Social Support, Self-Reported Health and Income", Social Indicators Research, 116(3), 2014, p: 887-898.
- 14.Sumner, A. "Economic and non-economic well-being: A review of progress on the meaning and measurement of poverty". Paper prepared for WIDER International Conference on Inequality, Poverty and Human Well-being, Helsinki, Finland, 2003.
- Tesfaghi, E., Martinez, J. A., and Verplanke, J. J. "Variability of Quality of Life at Small Scales: Addis Ababa, Kirkos Sub-City", Social Indicators Research, 98(1), 2010, p: 73-88.
- 16.United Nations Population Fund. "State of World Population 2007", Unleashing, the Potential of Urban Growth. New York: UNFPA, Available at: www. unfpa .org /.../ global /.../ 2007/695\_fi. 2007.

