

Evaluating Quality of Life in Rural Areas of Iran (Case study of central region in Sanandaj)

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ABSTRACT, For centuries, people have been looking for a good life, but the question has always been that what is the good life. In response to this question, different definitions and indices whether subjective or objective are discussed for the quality of life. There is not any definition that is accepted by everyone in this regard. It must be said that the quality of life is strongly influenced by the factors of time and space and its constituent components will be different with respect to time and location and levels of development. However, this paper discusses the quality of life index in rural parts of Iran that was performed as the case in the city of Sanandaj. The city is located in Kurdistan province of Iran in the West. Method of study is descriptive-analytical of a questionnaire-based survey, where the context related the quality of life has been assessed for the community of 361 families. The questionnaire used is formed in Likert 5 scale questions (from it is really ameliorated, 5 to really deteriorated, 1). In order to analyze data from field operations, two methods of descriptive and inferential statistics (t test, analysis of variance) are used. The findings, based on social, economic, and physical and environmental aspects show that in all components except the components of spare time and the component interaction and correlation, which are rated above average, the conditions of quality of life in studied rural community is lower than average. Analytical results show that the rural parts of Sanandaj city, in terms of the indices such as housing, drinking water, sanitation and income levels are not in a good situation. In order to empower the rural spaces to achieve a better and more healthy life, the first step is spatial organizing, and then infrastructure planning and service providing with public participation.

Keywords, Quality of life, rural areas, Sanandaj, Kurdistan, Iran. Index.

INTRODUCTION

Physical and mental health along with economic prosperity, are key elements of sustainable development, are considered its integral part for the development and improvement of living conditions. Each community will have the necessary dynamism and vitality when its citizens enjoy good physical and mental health (Harirchi et al., 2008). Quality of life is discussed recently in the literature on sustainable development and social development planning and modern economic issues, and has achieved a special place, and government agencies at national and local level as well as many institutions work on measuring and index - making for it (Kharzmi, 2007).

Undoubtedly, over the past three decades, quality of life, as a substitute for material prosperity, has become a major social goal for various countries (Schmit, 2002). Today, quality of life is considered an acceptable theoretical framework for living conditions of communities. Quality of life affects the individuals of a society according to exogenous factors such as production technologies, infrastructures, social relations, social institutions, and environment. The overall quality of life, in addition to economic factors, also includes social and environmental concerns. Quality of life, in some terms, indicates living conditions of people in a country or region (Roback, 1982). Early theories about quality of life, rather focused on personal concerns and priorities; but in recent years, the theoretical aspects, has changed from individual issues to social concerns such as security, freedom, quality of life and the extent and quality of social relations in the society (Schmitt, 2002).

Generally, the quality of life can be computed using the subjective and objective indices. Subjective indices reflect the subjective evaluation of life. This evaluation is achieved using information of people who have asserted their

welfare status through different questionnaires or census data. Such indices represent the standard of living of people and their attitudes to the environment. These indices are collected and analyzed, and then values of different social classes can be realized. Objective measures of quality of life are established based on tangible variables. These variables typically are collected and released by official bodies. The economic accounts, health, education, urban pollution, and other general information are examples of this type of information. The purpose of the objective method is to assess the general conditions, such as macroeconomics, the general conditions of the society and the indices related to population.

According to objective calculation method, quality of life may be defined as a reciprocal relationship between these four fundamental characteristics of human activity, "Population quality", "material prosperity", "the quality of the social system", and "ecosystems and environmental quality".

In fact, today, concept of quality of life is a complex and broad variable that is affected by several variables. Changes in income levels, living conditions, health status, mental and emotional stress, weather, leisure, family happiness, social relationships, and several other variables in compound will determine the quality of life and the changes of it (Jajarmi and Kalteh, 2005).

This is undoubtedly that the quality of life in rural areas compared to the urban areas, due to limited environmental resources and services will lead to very different results. Factors such as reduced employment and income in the agricultural sector, benefiting from services, housing, far distance of rural areas from urban centers, geographical isolation, poor communication and unsuitable and inefficient transport networks, have made implementation of policies to improve the quality of rural life more complicated (Rezvani and Mansourian, 2007).

Research studies in Iran show that rural development programs in the country before the Islamic Revolution were not very successful. However, after the Islamic Revolution, the fundamental transformation emerged in the rural lifestyle. With the development of relations between the rural areas and urban areas, and the formation of a revolutionary institutions like Housing Foundation, Imam Khomeini Relief Committee, Jihad, Services in rural and tribal areas, Islamic councils, seven member boards on land tenure, rural condominiums, cooperative housing, welfare institution and Shahid Rajayi Plan was trying to improve the situation of rural economic and social life (Azkia and Ghaffari, 2008). This is by no means the only factors affecting the changes in rural life, since the role of technology and its product in all levels of life could affect the rural life in villages which are in the geographic isolation and bring such a change in their lifestyle.

Kurdistan province is located in Western part of Iran, and is considered as one of the country's underdeveloped provinces. More than 49.6% of the population live in rural areas (Iranian Center of Statistics, 2005, 11). Studying the quality of life of rural people in the central region of Sanandaj, which is considered the capital of the province, can partly demonstrate aspects of quality of life in other rural areas. The key feature of this composite index is that it can determine the shortcomings and weaknesses of planning to a large extent, and by creating the appropriate solutions, identify the context for rural development and improve it.

Theoretical framework

Researchers believe that amending quality of life, such as concept of development, is somewhat ambiguous. On the one hand, the quality of life arises as a thought of how an individual live, and in more general aspect, involves living in different places around the operating positions include the environment or culture in a given society (Pal, 2005). According to Galman (1984), quality of life is span extension of life and ambitions rooted in the experience. Winsted (1985) found that quality of life is a highly subjective concept, which is based on happiness and satisfaction with the factors that have impact on social welfare, mental, and physical performance. Zan, (1992) knows Quality of life in satisfaction degree of the individual's life experience. According to him, quality of life include life satisfaction, and social, economic and ecological factors. World Health Organization Quality of Life Group (1995) defines quality of life as, People's perception of their position in life in the context of culture and value systems in which they live. Life satisfaction is considered as the main components of quality of life.

Franz and Power consider quality of life as satisfaction or dissatisfaction with aspects of life that matter to people. Talsky and Sell define quality of life as evaluation and satisfaction of individuals on existing performance levels compared to what is considered ideal or possible for him / her. According to Paul, Quality of life is a measure of fulfillment of psychological, mental and physical needs which is defined by society (Pal & Kumar, 2005). Abraham Maslow in 1943, announced his pyramid of human needs. According to the pyramid, the first humans are trying to overcome their basic needs and then the higher needs. Physiological and basic needs are human vital needs like air, food, water, warmth, sleep, health and sexual satisfaction.

Morris in 1979 introduced quality of life index as an alternative to the GDP per capita, in order to assess the quality of people's lives. Physical indices include life expectancy in an age of a year old, and the infant mortality rate, or the percentage of literate people (Kharazmi, 1384, 4). In 1998, by Lars Iceberg and Andrio Sharp, an index of

economic welfare was presented. This index is evaluated by factors including consumption flows, stock density, income inequality, and insecurity and uncertainty in providing future revenues, (Onagh, 2004). In 1990, the UN for Human Development Index as a measure of development used three indices of life expectancy at birth, educational achievement, and real GDP per capita in different countries. Daskopta and Weil, (1992) provide a measure of quality of life which represent the per capita income, life expectancy at birth, adult literacy rate and political lawful indices such as civil liberties (Onagh, 2004). Quality of life index as a new paradigm in the study of humanities studies indices such as economic development and GDP and the non-material parameters such as quality of work, level of education and culture, health medical standards, quality of leisure, environmental conditions, political space, individual happiness and liberty, and national unity.

In an aggregation, it can be said that economists employ the concept of utility rather than quality of life. Climatologists and geographers use comfort of habitat climate and calm atmosphere. Psychologists use the term satisfaction or happiness. Medical students relate quality of life with health, which include subjective assessment of the individual's current health status, health care, health promotion activities which cause the general level of activity and allows the person to make his / her life worthwhile to pursue goals.

According to the common part of these views, the quality of life can be stated as the concept to demonstrate how human needs are met, and a measure of perceived satisfaction and dissatisfaction with various aspects of life of individuals and groups. It must however be acknowledged that quality of life heavily influenced by factors of time and space and its constituent components given the time period and geographical location (TaHERI et al., 2011). Second, the concept of quality of life is a relative issue, it is not possible to give a comprehensive definition. The third is that quality of life while having objective dimensions and independence on objective and external conditions, is internal and subjective. So it is influenced by individual perceptions and understanding of the realities of life. Fourth, the quality of life is affected by a lot of community values, and in fact, is explained based on personal, social or national values.

Literature Review

Concept of quality of life in the history dates back to Aristotle's age in 385 years before Christ. At the time of Aristotle, "good life" or to do things well, "is intended to mean being happy (Fayers, 2000).

Academic approach to quality of life in 1920, when Pigo introduced it in his book entitled economy and welfare, found a new course. The 1930s, American researchers began to evaluate quality of life in different parts of their country, and then the concept was interested by the scientists in psychology, economics, politics, sociology, geography, and medicine as an interdisciplinary subject.

Easterlin & Angelescu (Easterlin & Angelescu, 2007) using cross-sectional and time series data across countries examine the relationship between quality of life and economic growth. They tried to find response to the question that economic growth to what extent improves the quality of life of individuals (including financial, health, educational, political, etc.) in various countries. The results showed that the increase in the per capita income is associated with a significant increase in quality of life.

According to studies of research institute affiliated with the World Bank named international Living, which calculated the quality of life index in 2007, our country ranks 190 among 195 countries in the world. Meanwhile, France is ranked first and Iraq is in the last rank (Quality of life index, 2007).

The focus of geographical knowledge on concepts related to quality of life goes back to the late 1960s. David Smith was the first geographer talked about quality of life, prosperity and social justice in geography. To assess quality of life, social well-being and social equity, this geographer used mental social indices and objective comparisons. Questionnaire was used to measure the first and observation and statistics are used to measure the second (Smith, 2002).

In the 70's David Harvey also published four articles on topics such as food, housing, health services, education, social services and environmental services, consumer goods, recreational facilities, pleasant neighborhoods and transportation, as nine categories of human needs according to Harvey are minimums of human need (ibid).

Mercer Institute for Research in the field of human resource in the world which is an accredited institution, examined the quality of life, quality of life was evaluated in different countries in 2007, where Iran won 83th rank. Finland, Iceland, Norway and Sweden were chosen as the best quality of life in the world. Each year the institution with regard to 39 criteria performs the assessment of quality of life in countries and deals with the world. These criteria include environmental factors, economic, social, political, health, personal safety, education, and transportation ... (Harirchi et al, 2009).

Quality of Life in Iran is not studied since long ago. Its history goes back to a recent study has been done regionally and nationally in the area. A study of M. Baskha and his colleagues on quality of life index rating in the provinces of Iran is one of them. The results show that among 28 provinces, three provinces of Tehran, Khuzestan

and East Azarbaijan province have the highest quality of life account, and other provinces have not been satisfied with their quality of life (Baskha et al., 2010).

Pourtaheri and his colleagues assess quality of life in rural villages in Lorestan, Khaveh, and the results found that the quality of education, quality of the residential environment, the quality of the physical environment and the quality of earnings and employment is lower than the national average (PourTaheriet al., 2011).

Rezvani and colleagues in other studies analyzed rural development to city and its role in improving the quality of life in two regions of Saheb in Kurdistan and Firouzabad in Lorestan. The results show that overall, rural development to city causes a dramatic improvement in life in the two cities (Rezvani et al., 2010).

Rukn al-Din Eftekhari and his colleagues in the evaluation of quality of life in rural spatial distribution of city Delfan, found the results that the quality of education, environment, housing and the physical environment, health and safety, and level of income and employment is assessed below the average. Also, how much the rural areas are farther than the city center, the quality of life will change accordingly (Honorary et al., 2011).

MATERIALS AND METHODS

Method of study is descriptive-analytical of a questionnaire-based survey, where the context related the quality of life including quality of education, quality of life, health and safety, environment, housing, environment and infrastructure, employment and income and quality of leisure time has been assessed for the community of 361 families. The study population consisted of village central city of Sanandaj, which has an area of over 2,141 square kilometers.

According to the latest census, it has a population of over 48,504 people in 2006. The population of Sanandaj is equal to 52 percent of the rural population of 25,252 people in the city of Sanandaj. Based on the Cochran sampling 361 households were selected as samples. The questionnaire used is formed in Likert 5 scale questions (from it is really ameliorated: 5 to really deteriorated: 1). In order to analyze data from field operations, two methods of descriptive and inferential statistics (t test, analysis of variance) are used. Accordingly, in order to compare the mean of each dimension of quality of life based on the number of items, modification of the basis for the assessment of quality of life is considered. It is tried in this regard that while being inspired by others' empirical studies in the field, design the index in terms of the reliability and validity of the data that take the views of experts into consideration. The questionnaire was filled in two stages, preliminary and final evaluation questionnaire responses obtained from 30 and statistical calculations, the final questionnaire was adjusted.

Table 1. theoretical variables of the research

Number of respondents	Cronbach's alpha	indices	variables	scope
6	0.860	The landfill, sanitary method of sewage collection and disposal, not to bein the privacy of homes and rivers flooding, water pollution, degradation and erosion (plowing down the slope), yield per unit area, drinking water quality	Environmental quality	environmental
5	0.701	Home of durable, quality materials used, housing facilities (systems - heating, ventilation, sanitary and bathroom) with skylight housing situation, housing conditions of the animals and vermin,	Residential quality	physical
9	0.849	Sewage disposal, access to mobile phone coverage, proper road access, public transport, during a limited period of time to reach the city, as well as the time required to access water, fuel and access to administrative services, access to TV networks	Infrastructure quality	
4	0.664	Easy access with little time to school children celebrating, having a good and experienced teachers, have appropriate laboratory facilities and schools, news schools and having quality	education	
4	0.709	Sense of personal security, future, life satisfaction, the ability of household to meet basic needs	Individual wellbeing	social
4	0.821	Having a collective spirit of cooperation, adherence to customs and views in perspective, during Eid, in consultation with the village for specific decisions	participation	
3	0.741	Sports facilities in the village, the annual family travel, access to arts and culture	Recreation and fun	
6	0.866	Family income, savings, living facilities (fridge, TV, car), cost of living, safety, income, having to do physical work,	Income and employment	economical

Table 2. villages studied for the research in central area of Sanandaj

population	Number of families	Name of village	Name of area
386	103	KARASI	Abidar
1008	263	KELANAH	
2172	476	KARGO	
1225	274	DADANAH	
1618	360	ARENDAN	
272	62	SOFEYAN	
413	80	KALAKAN	Arandan
208	48	GARMASH	
261	63	MANSOR BALAGEI	
332	75	YUNES ABAD	South Hosseinabad
525	131	SORGH DEZAJ	
3342	807	SALVAT ABAD	Houme
606	123	GHEYARAH	
753	196	DOLAT ABAD	
1018	263	ASAV LAH	
4214	984	NANALAH	
1522	362	HASHAMEZ	East Javeroud
677	186	TAGHTAH	
834	201	SHYAN	
1650	386	GALIEN	
767	206	TOREVAR	
566	139	SOV	Naran
204	48	ASKARAN	
423	82	CHNAN	SarabQamish
256	48	MANI DOL	
25252	5966	25	Total

RESULTS AND DISCUSSION

Results

To achieve results, first in the single-sample T-test, the quality of life in terms of social, economic, environmental and physical was measured. And then to assess the distribution and quality of life in rural areas as mentioned, one-way ANOVA was used. Table 3 shows that all the components, except for leisure component and tinter action and correlation component which are rated above average, in other cases, the quality of life of the rural population is evaluated below average.

Table 3. Level of significance of variables affecting the quality of life for residents

Average limit	Significance level	mean	T statistics	component	aspects
16	0.000	15.215	-3.568	education	social
13	0.000	12.33	-3.651	Health and security	
15	0.000	18.15	11.10	Interaction and correlation	
9	0.000	7.66	8.25	Spare time	
24	0.000	19.29	-19.212	Income and employment	economical
13	0.000	11.61	5.651 -	Residential environment	physical
19	0.000	17.15	-5.885	infrastructures	
17	0.000	15.24	6.81	Environmental quality	environmental

Table 4. variance analysis for the different qualities of life of villages based on location

Average squares		Total squares		Significance level	aspects
Inter-groups	Intra-groups	Inter-groups	Intra-groups		
2724.421	21.101	6242.21	7344.110	0.000	physical
28.254	6.714	214.301	1922.228	0.000	economical
8542.121	24.22	1840.401	1171.124	0.000	social
1145.055	7.564	1180.34	1845.236	0.000	environmental
12439.851	59.599	9477.252	12282.698	0.000	total

Based on Tukey's test, in terms of quality of rural life, villages are divided into two groups of located in foothills and mountain, where, in terms of quality of life, as Table 4 shows, the villages in the foothills have a higher quality of life compared to the villages in mountains. Table 5 shows the quality of life in terms of locating in foothills or mountains.

Table 5. Classification of villages according to the quality of life components in rural areas and their location

Significance level at Alpha level of 0.05										Village
Total quality		Physical quality		Social quality		Economical quality		Environmental quality		
2	1	2	1	2	1	2	1	2	1	
	02,141		25,38		45,48		18,17		14,37	Located in foothills
95,105		54,31		11,36		19,11		11,27		Located in mountains

The findings show a direct relationship between quality of life and a distance from the city, so that when distance is greater, then the quality of life is far worse. It is more demanding in the economic and physical aspects. The other conditions are the same.

Table 6. Analysis of variance of the difference between the quality of life based on distance

Average squares		Total squares		Significance level	aspects
Inter-groups	Intra-groups	Inter-groups	Intra-groups		
66.684	5.214	1423.147	2114.564	0.000	physical
11.211	9.224	122.564	1945.454	0.000	economical
355.184	11.652	49.112	1021.661	0.000	social
1011.218	33.121	2966.332	10321.321	0.000	environmental
3161.226	115.267	1362.214	33281.122	0.000	total

Again, Tukey's test was used and the distance of villages from city center was calculated, and villages were divided into three groups of 3, 2, 1 in two categories.

The first includes villages that are less than 10 km away from city center. The second group consists of villages that are more than 10 kilometers away from the city center. The findings suggest that the villages that have less distance to cities use urban facilities with more ease. As a result, enjoy a higher quality of life. In other words affects them most. Therefore the quality of life in villages near the city is above the farther villages. Tables 6 and 9 show villages are graded based on the distance from the center of the.

Table 9 - Classification of components according to the quality of life in rural areas and their distance to the city center (Sanandaj)

Significance level at Alpha level of 0.05													village		
total quality			Physical quality			Social quality			Economical quality			Environmental quality			
3	2	1	3	2	1	3	2	1	3	2	1	3	2	1	
		3,118			2,18			6,51			1,15			4,33	Less than 5 kilometers
	5,104			2,14			2,46			2,12			9,31		0-6 kilometers
5,89			6,11			8,38			8,9				3,29		+10 kilometers

CONCLUSION

In the past three decades as an approach to life quality was introduced as a new approach in the context of sustainable development, where the 9 indices of production technology, infrastructure, social relations, social institutions, geographic and environmental factors are analyzed. In the past, the concept of human development was mentioned in which the three categories of income, education and life expectancy were examined. Today, the level of technology in human life not only have increased the level of welfare, but also has made evaluation and measurement of development index more complex. Therefore, to be able to give the full image to show the real development trend of regions, the economic, social, cultural, geographical and environmental indices which include all aspects of human life should be studied. Thus, the concept of quality of life, has physical, social, psychological, environmental and economic aspects. According to the results, we can say that the central region of Sanandaj faces fundamental challenges. Table 8 shows the results of 9 component of quality of life, including education, health and security, employment and income, infrastructure and environmental quality, residential environment and leisure, except for one index, which is quality of interaction and correlation, the indices have been lower than the average. Also the results of field studies show that more than 87 percent of flourishing regions are located in foothills and mountainous locations. Moreover, in terms of housing structure, according to the course they are built, which is more than 27 years, have old texture and in terms of the type of materials used, are short-lived. Furthermore, in terms of subsistence economy, most of villagers live with the traditional farming and horticulture. Thus, their crops are limited, and their income is low. In the quality of the environment, usually, landfill disposal and human and animal waste pass the center of the village (valley) that is open. This is potentially considered as a threat to the health and wellbeing of residents. In terms of geography (climate) the period of ice is prolonged and sometimes erosion and fall factor

causethe network communications blocked.The issue of access to safe and treated drinking water, more than 85 percent of the villages in order to obtain drinking water, use natural water springs andlack treated and purified water.Data also show that in terms of the distance from the urban areas, the villages that have less distance to cities use urban facilities with more ease. As a result, enjoy a higher quality of life.

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