

# Assessing the quality of life (QOL), its significance in urban planning and the feasibility of establishing a Quality of Life Reporting System (QOLRS) in cities, the historic city of Esfahan as the case example

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## 1 ABSTRACT

Quality of life (QOL) represents the level of welfare as recognized by the people. Its key concept is the recognition of every single individual's expectation from life and its quality. Besides, the QOL introduces the differences between the hopes, wishes and expectations of individuals as against the opportunities and limitation of each society. In this paper the QOL concept, the community trends approach and methodology of launching a Quality Of Life Reporting System (QOLRS) are applied not only to assess the QOL and its impacts on the urban planning system in the historic city of Esfahan, but also to test the feasibility of launching a QOLRS in the city chosen as the case example, i.e., Esfahan. To reach this aim, information about the measures and indexes of QOL are obtained from two different streams, one from the official sources and the other through the direct contact with the citizens. After analysing the results, this assessment revealed the fact that the differences in the quality of employment, population resources, and community affordability measures were higher. While, despite a high degree of difference between the applied QOL measures, the difference in community stress, community participation and community safety measures are noticeable. The results also indicated the possibility of establishing a QOLRS in this city based upon the information sources used in this study, as well as the prospects of enhancing the urban development planning and management procedures through setting up an adapted process of organizational framework and control mechanism, production of planning visions and goals based on community agreements and evaluation and decision taking processes. Also it was deduced that the QOLRS can produce an appropriate blueprint for reaching consensus and a common language between citizens, planners and urban decision takers in a sectoral and centralized planning system of this city. The paper emphasises the necessity of reaching an integrated urban planning and management system through a well devised set of improvements to the inter-organizational relations and structure of the cities in general and this case example specifically.

## 2 INTRODUCTION

The view of enhancement of QOL has been used in urban planning and urban development, in many countries, particularly the more advanced ones. The emphasis on the importance of human resources as the most important capital of a society is the highest characteristics of this view. Different countries according to their economic, social, cultural and environmental peculiarities have used different methods to utilize the concept of QOL and its enhancement in their society. In this article with the use of the concept of QOL and QOLRS its attempt to investigate the QOL and its effect on urban planning in the city of Esfahan. The expecting aims are:

- Recognition of the concept and approaches of QOL and its application in urban planning.
- Assessment of measures and indicators of QOL in the city of Esfahan.
- Study on applicability of creating a QOLRS in city of Esfahan.
- Evaluation of the effects of QOLRS in the improvement of plan producing process, and urban management of Esfahan.

In this paper the QOL concept, the community trends approach and methodology of launching a QOLRS are applied not only to assess the QOL and its impacts on the urban planning system in the historic city of Esfahan, but also to test the feasibility of launching a QOLRS in the city chosen as the case example, i.e., Esfahan. To reach this aim, information about the measures and indexes of QOL are obtained from two different streams, one from the official sources and the other through the direct contact with the citizens.

In this regard, at the first stage the necessary informations and indicators to measure the QOL in Esfahan from formal and informal sources and also through questionnaires from the residents of this city about their views were collected and compared with the information from Iran and also a developed country with ample experience in the field of QOL assessment and establishing a QOLRS, i.e., Canada.

At the second stage, the effects of QOL concept in the stages of a plan-making process which are affected most will be studied. The similarities of the plan prepared for Esfahan with the structure that is affected by the QOL concept and the adopted approaches have also been studied. At the last stage - with the integration of the results of this stage with the results obtained from the evaluation of the Esfahan's QOL, the possibilities of creating an appropriate QOLRS in this city - which has a centralized and sectoral planning system - will be examined. The result can be used as a device to strengthen the interrelation between not only the organizations but also all the stakeholders in a decision-making arena, to achieve an integrated urban planning and management system.

### 3 QUALITY OF LIFE CONCEPT

The QOL is the translation of social and environmental considerations in the process of urban plan preparation and implementation. The QOL concept can prompt the sustainable development and increase the sensitiveness to carrying capacity of the earth and also the human capacity. This concept is the symbol of answering the needs of post modern era and follows a common ground to counter the spatial disparities. On the other hand, enhancing the level of the QOL is turned to be an appropriate device to achieve a better situation in the economic competition cycle, causing a move from a sole economic competition toward the competition of cities. The improvement of QOL in the cities can be considered as a condition in which the needs of societies to human resources and technological progress are achieved.

Within a planning framework, QOL represents the level of welfare considered by the people, and a key concept of it is the recognition of the expectations of every individual from life – in general - and from its quality. QOL represents the level of enjoyment of a person from the social and welfare services prepared for upgrading the QOL and consists of satisfaction and the opportunity to reach a situation which a person enjoys his/her life and also the disparities of hopes, wishes and expectations of an individual and his or her experiences from what is considered to be an acceptable QOL. Therefore the more the positive aspects and QOL, the more the level of satisfaction will be. (Smith, 1994; liu, 1974; Rogerson, 1998; cobb, 2000)

### 4 COMMUNITY TREND APPROACH

The existing approaches relative to the application of the QOL concept are "livability comparison approach", "personal well-being approach", "community trends approach", "wage differentials approach" or "market/resident approach". Among these approaches, some are based on the principles of economics, some on social sciences in general and also requirements of the ideology and also the practical aspects of planning. The urban decision makers which are pursuing the aim of correcting community relations that affect the QOL use the personal well-being approach. The economists and those groups advocating the economic development use the wage differentials approach and livability comparison approach, and those that hope to plan for upgrading the QOL of communities, use the community trends approach.

Urban and regional planners can use all the four approaches as introduced above, but it seems that community trend approach can fit better in planning and can better assist the planners. The reason for this is that first, this approach evaluates the trends and priorities of a community through time and consider these trends and changes as part of an ongoing process of development in any society. The second reason is that this approach encourages the discussions about the QOL indicators by the interest groups. Third reason is that the data used and applied by this approach from the facts concerning the QOL of the community can be considered as a set of appropriate foundation for decisions taken by all sectors of each community.

The fundamental prerequisites about the QOL issues of each society -based on community trend approach- are as follows:

- People are attracted to the places they like, and change the local conditions through time
- Mostly, people compare the QOL during a period of time and also compared with other places
- The political issues about the QOL and decision making occurs within the boundaries of each urban area or each urban region
- The results of studies could only be valid if it is according to the ideas and views of local people of any community

Based on the aforementioned principles and prerequisites of this approach, the process of achieving favorable results in evaluating the QOL are summarized in five basic stages as shown in figure 1 (Myers, 1988).

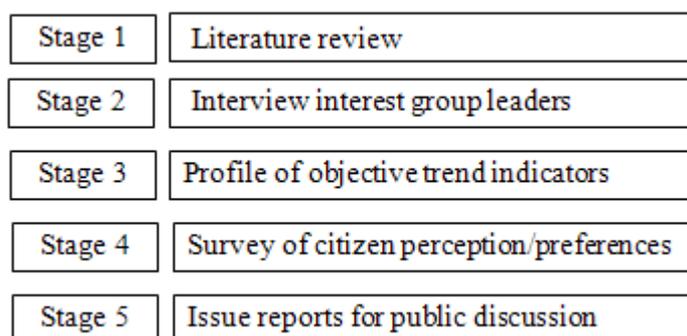


Fig. 1: Five basic stages for measuring the QOL, source: Myers, 1988

## 5 LAUNCHING A QUALITY OF LIFE REPORTING SYSTEM(QOLRS)

In this paper an attempt has been made to utilize Federation of Canadian Municipalities (FCM) experience in Canada which comes below:

In 1996, FCM commissioned a study of how changes to the funding structure of federal transfer payments would affect municipal governments. FCM concluded these changes would have an impact on growing municipal responsibilities, but members lacked the tools and the data to debate this and other policies on behalf of their communities. To ensure a more effective voice in the future, the largest urban members of FCM recommended the creation of a reporting system to monitor the QOL in Canadian communities. FCM immediately began developing the QOLRS. By providing a method to monitor QOL and aspects of the social, economic, and environmental health of communities, as a tool to (FCM, 2001; FCM, 2002):

- Identify and promote awareness of issues affecting QOL
- Better target policies and resources aimed at improving QOL
- Support collaborative efforts to improve QOL
- Establish municipal governments as a strong and legitimate partner in public policy debates

### 5.1 Focusing on the QOL

The QOL measures reflect important dimensions of daily life at the community level. Public confidence in government and institutional leadership requires a focus on the QOL. QOL measures cross over sectors, programs and policies, putting the impetus on policymakers to make a link between what popular reports show and the experience of individuals and families. The QOL approach measures outcomes in "people terms" to encourage better communication between governments and communities, greater program transparency and greater accountability for results. The QOLRS is built conceptually on the initiatives outlined above (FCM, 2001).

### 5.2 Focus on outcomes

For the most part, the QOL concept is focused on measuring outcomes. Outcomes measurement is part of a public sector response that emphasizes accountability of public policy and transparency in the operations of public institutions. Leading-edge analysis is focusing on QOL indicators, assessing what actually happens to people as a result of social, economic and environmental changes (and, of course, of their own lifestyle choices), and on how well public policies serve to improve their life situation (FCM, 2001).

### 5.3 Information sources

Where possible, the information used in this reporting system has been obtained from national sources. Where special data runs were prepared, relating national measurements to community boundaries, the source notes indicate "Special Tabulations". The result is a powerful database for monitoring QOL, evaluating

policy outcomes, and researching evolving needs. The information in this report is only the surface of the database (FCM, 2001).

#### 5.4 Information attributes

The establishment of a comprehensive QOL monitoring system is complex. The information has to be meaningful at the community level; available annually and on a nationally consistent basis; and be easily understood. Indicators have to reflect the various dimensions of living reality, and use the substantial existing research that has identified consistent relationships among those dimensions (FCM, 2001).

#### 5.5 The QOL Measures

Eight complete sets of indicators are used for the QOLRS. A summary of the indicators follows (FCM, 2001):

- Population Resources Measures (PRM)

This is a profile of population characteristics, population growth, education and literacy levels, cultural diversity, immigration and the age structure of the population. It provides a basis for the monitoring of long-term demographic changes.

- Community Affordability Measures (CAM)

These measures compare levels of income with the cost of living. A higher affordability measure occurs when average incomes are relatively higher than average costs of living.

- Quality of Employment Measures (QEM)

These measures monitor employment dimensions and trends, such as equity and the distribution of employment, partial employment and unemployment among population groups.

- Quality of Housing Measures (QOHM)

These measures include the affordability of housing to rent (relative to prevailing incomes), percentage of homes in need of repair, vacancy rates and housing starts.

- Community Stress Measures (CStM)

These measures reflect social problems and they examine variables related to vulnerable groups. They include the incidence of low income, the incidence of lone-parent families, and the incidence of crisis calls, bankruptcies and suicides.

- Health of Community Measures (HOCM)

These measures reflect the rate of premature deaths (before age 75), infant mortality, the percentage of babies born with low birth weights, and workdays lost due to illness or disability.

- Community Safety Measures (CSFM)

These measures reflect rates of crime and violence, youth crime, and the rate of unintended injuries.

- Community Participation Measures (CPM)

These measures reflect the involvement of citizens in their community, and include political participation (voter turnout), daily newspaper circulation, charitable giving and support for community projects as measured by contributions to the annual United Way campaign.

## 6 QOLRS STRUCTURE AND ITS ESTABLISHING PROCESS IN ESFAHAN

QOLRS consist of subsystems of input, output, organizational structure, data processing and information transformation. These subsystems by itself are divided into parts. They have mutual relations with each other and have different inputs and outputs, and interact with each other with coordination. The inputs to the system are the information and data about the measures and indicators of the QOL which are obtained from different sources, and its final product is the report of the QOL. In every stage of this system returning to the previous stage and making necessary correction is possible (Fig. 2).

The condition for appropriate function of this system is the right relation between the parts of the system and true data and information entry. Continuation of different implementing stages, and a real reporting from the existing situation without any personal interference in the reporting of the QOL improves the efficiency of the result of the system and provides the study of changes in QOL in a single community and shows the positive and negative trends.

To commence the operation of QOLRS in Esfahan, seven consecutive stages were designed, as follows:

- To study the concept of QOL and getting acquainted with its special features
- Establishing different sectors of organization subsystem structure and coordinating them
- Collection of the QOL measures and its related indicators, considering the local conditions
- Creating the data and informations analysing subsystem
- Developing a saving opportunity and recycling and updating of indicators analysis results
- Preparing the QOL report
- Creating informations giving of QOL report and their interrelations

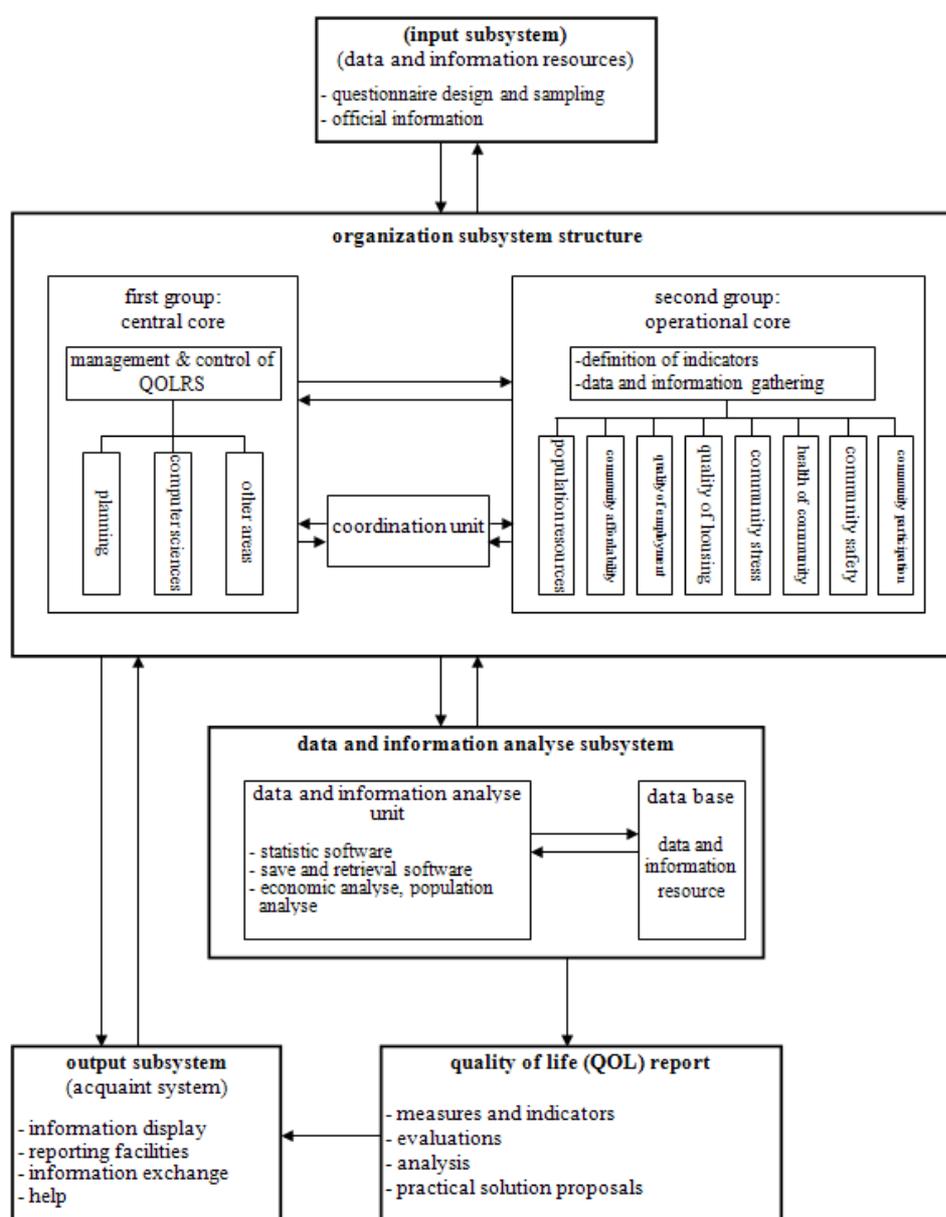


Fig. 2: QOLRS subsystems and their interaction relations as proposed for Esfahan, source: author, 2010, for this paper

## **7 ASSESSING THE QOL AND ITS SIGNIFICANCE FOR URBAN PLANNING IN ESFAHAN**

In order to apply the QOLRS in assessing the QOL in Esfahan and reporting it, a six step process of analysing the QOL was designed, as follows:

- Introducing the measures and indicators of QOL used in the QOLRS
- Selection of the appropriate measures and indicators of QOL
- Gathering data on the indicators of QOL in three ways, namely, first by reference to the available official information of different public organizations, second through inquiry from the relevant expert officials and authorities, and third by conducting questionnaire surveys of people's opinions about their QOL
- Managing data on the indicators of QOL used in QOLRS by constructing different tables
- Comparing and interpreting the indicators of QOL in Esfahan and the indicators used in QOLRS in the Canadian cities, and comparing the findings with people's opinions
- Analysing for reaching the results about the findings of this search

Upon the implementation of the project, Esfahan was divided into 10 districts. To find about the citizens' opinions, the uniform random sampling method was used, and in total 50 surveys were conducted equally for each district. The surveys were completed by the citizens, experts, authorities, and the conductor. The questions were asked based on the measures and indicators of the QOL's information needs and those of the sampling population's characteristics. The information regarding the measures and indicators of the QOL was common among the citizens, experts and the authorities' opinions, and those of the official organs. This enabled us to use the data simultaneously and in combination in the QOLRS, and analyse the QOL accordingly.

The most important findings of the analysis of the QOL in Esfahan are presented below. This is according to the classification of the measures used in the QOLRS designed and proposed for Esfahan in this paper (the quantitative data are not presented here due to their large amount)<sup>1</sup>.

### **7.1 Human Resources Measures (HRM): Information attributes**

- The high proportion of the young population of Esfahan (%52.7 of total population)
- The very high population growth rate (%3.9 growth rate for 2 years)
- The very high labour force replacement ratio (2.5 new entrant people versus each leaver)
- A good quality general education while a very poor technical education (%13 versus %1.4)
- A very low labour efficiency and productivity rate (%34.9 of total labour force have no general and technical education)

### **7.2 Community Affordability Measures (CAM)**

- low household incomes (\$4273 per 1 year) and low cost of living (\$4919 per 1 year)
- The lack of any financial savings due to the high costs of living as compared to the incomes, plus the ever-more financial vulnerability of households to financial crisis
- The increased imbalance of costs and incomes of the society's urban middle classes
- The high percentage of the urban middle classes (%77.9) and the less class differences in Esfahan in comparison to the whole country

### **7.3 Quality of Employment Measures (QEM)**

- The high unemployment rate (%3.5) – especially the high long-term unemployment rate (%65.5 of total unemployment) – in Esfahan and the low employment rate of people within the age group who

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<sup>1</sup> The quantitative data on the indicators of the QOL were presented in the author's M.A thesis (Sh. Beheshti University, 2006) under the title of "Application of the Quality of Life Reporting System in Urban Planning (The case of Esfahan)"

are employed especially among the 15 – 34 age groups (%18.8) and the labour force aged 40 and above (%14.8)

- The high proportion of temporary employment rate compared to the permanent one (%61.4 versus %37.2)
- The low social support (%9.1) and employment insurance (%1.46) for the households as a result of the decreased job security and incomes
- The low average wage rates (\$0.98 hourly)

#### **7.4 Quality of Housing Measures (QOHM)**

- The high housing rentals and purchase prices in Esfahan and the difficulty in purchasing or renting affordable accommodations of the lower income households (rent as a percentage of median family income is %41 and average price for a 2 bedroom apartment is \$31555)
- The lack of welfare and safety standards in more than 70 percent of houses in the city
- Allocation of almost 41 percent of the income of households to housing

#### **7.5 Community Stress Measures (CSM)**

- low number of the lone-parent families (%13.3) and the low bankruptcy rates of the consumers and economical enterprises (9.8 per 1000 establishments)
- The high fertility per 1000 women aged 15-19 (92.8 per 1000)
- The very low suicide rate (near 0.0)

#### **7.6 Health of Community Measures (HOCM)**

- The high infant mortality rates (208 infant mortality per 1000 live births) and low birth weights babies (%3.6 of single births less than 2500gr)
- The low premature mortality rate (184 per 100000 population)
- The high hospital discharges rate (20057 per 100000 population) that decreased labour productivity rate

#### **7.7 Community Safety Measures (CSFM)**

- The increased number of crimes committed by the youth due to the higher proportion of Esfahan's young population
- The growing unsafety trend
- The lower rate of moral crimes (467 per 100000 population) in comparison to the financial ones (3695 per 100000 population) and the heavy injuries rates resulting from the committed moral and financial crimes

#### **7.8 Community Participation Measures (CPM)**

- The low community participation rate (%46.83) and the high fluctuating voting rates (from %29.5 to %63.7)
- The people's low level of awareness of their collective destiny and their little attention to the sustainability issues and the needs of future generations

### **8 THE ROLE AND SIGNIFICANCE OF THE QOLRS IN URBAN PLANNING IN ESFAHAN**

Esfahan is the second industrial city of Iran which has historical and heritage importance too. Its historical importance goes back to many centuries back. This city - in its different historical periods - has sometimes reached its peak of fame and sometimes was led to its demise. The city of Esfahan prospered greatly during the 12th and 13th centuries and has many of its invaluable heritages from that period. Esfahan was selected as the capital city of Iran during the 16th and 17th centuries and it achieved greater growth and fame and was expanded. By the turn of the twentieth century, Esfahan, like the other Iranian cities, underwent dramatic

changes on the domestic and international scenes; and there was an increase in its urban growth rate, especially after the advent of the modernization movement in Iran in 1930's. At that time, Esfahan's spatial structure underwent a great deal of incompatible changes, e.g. new streets were designed, textile factories were established, and official buildings were constructed, and the city's infrastructure was renewed to include fire stations, and water and electricity networks, most of which were done without any well-prepared plan.

The first well-prepared urban development plan for Esfahan was produced in 1957 as part of the country's second national seven-year development program (1963-1956). From that time onward, seven plans has been made, including a comprehensive regional plan, three comprehensive urban development plans, and three detailed plans. Such plans aimed at controlling the landuse and urban growth rather than paying attention to the people's QOL. In this study, an attempt has been made to investigate the substantive issues and the implementation of urban planning in Esfahan, and to pursue the ways in which it was affected by the notion of QOL and to assess the degree of attention paid to the QOL in Esfahan and its urban planning. The QOLRS played a significant role in designing the organizational and control framework, and helped to devise the broad planning goals, to evaluate decision-making processes and its relation to the other urban planning aspects. This is illustrated in Figure 3, which shows the extent by which different Esfahan urban planning processes were affected by the discussed notion of QOL. No urban plan in Esfahan so far has intended to pay direct attention and to enhance the QOL as a definite and broad goal. This is while there are more points of similarity between the urban plans in Esfahan and the notion of the QOL in respect to gathering data, and less in respect to evaluating the planning goals (Fig. 4).

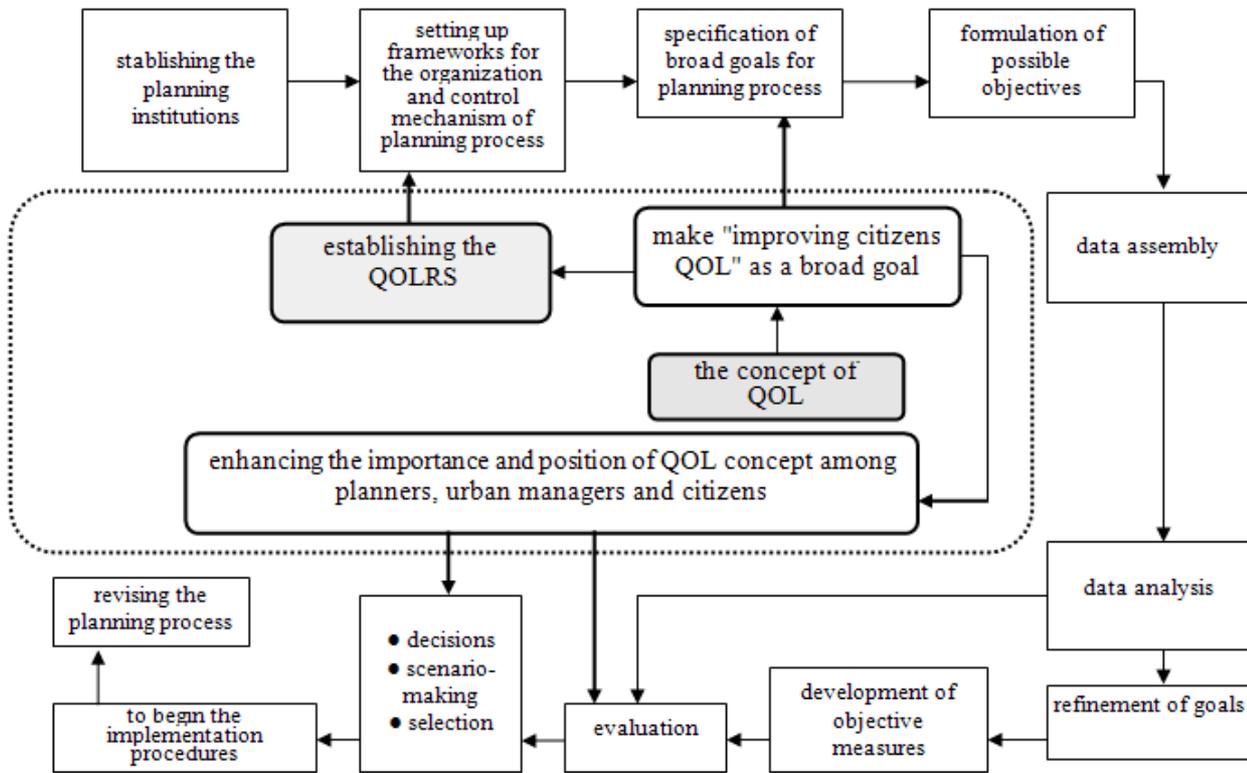


Fig. 3: The effects of the QOL concept in plan-making process in Esfahan, source: author, 2010, for this paper

plans	plan maker	year	the amount of QOL concept effects on the most important stages in plan-making process				
			setting up frameworks for organization and controlling planning process	specification of broad goals for planning process	data assembly	evaluation	decisions scenario-making and selection
master plan	F.H.Cocks consultants Co.	1958	L	L	L	N	L
master plan	Organic consultants Co.	1971	N	L	L	N	N
detailed plan	Organic consultants Co.	1975	N	N	N	N	N
comprehensive regional plan	ministry of housing and urban development, local office in Esfahan	1986	N	L	L	N	N
master plan	ministry of housing and urban development, local office in Esfahan	1988	N	N	L	N	N
detailed plan	ministry of housing and urban development, local office in Esfahan	1997	N	N	N	N	N
review of the detailed plan	collaboration between seven consultancy companies	1997	L	L	L	N	L

table content key: H: direct and high effect (more than %70) L: low effect (from %30 to %70) N: with no effect (less than %30)

Fig. 4: The amount of QOL concept application in the most important stages of Esfahan plans plan-making process, source: author, 2010, for this paper

The QOLRS has attempted to enhance the quality of people's lives as the main goal of the urban plans; and therefore, it has expanded the horizons of the social, economical, structural and environmental issues. Thus, it takes into account all the public organizations and their behavioural structures and establishes relations between the citizens, the municipality and the other official bodies. The annual QOL report publications show the results of all the administrative bodies, organization performance, their strength and weaknesses, and their general development trends. It is possible to use all of the potentials and strengths of the officials and also the public opinions for the production and implementation of the urban plans in Esfahan. Hence, the QOL concept and QOLRS - as an applicable tool for urban planning - can provide a common language for the consensus of the urban policy making in a sectoral and centralized urban planning system, and to use it as a tool for a coordinated and an integrated urban planning and management (Fig. 5).

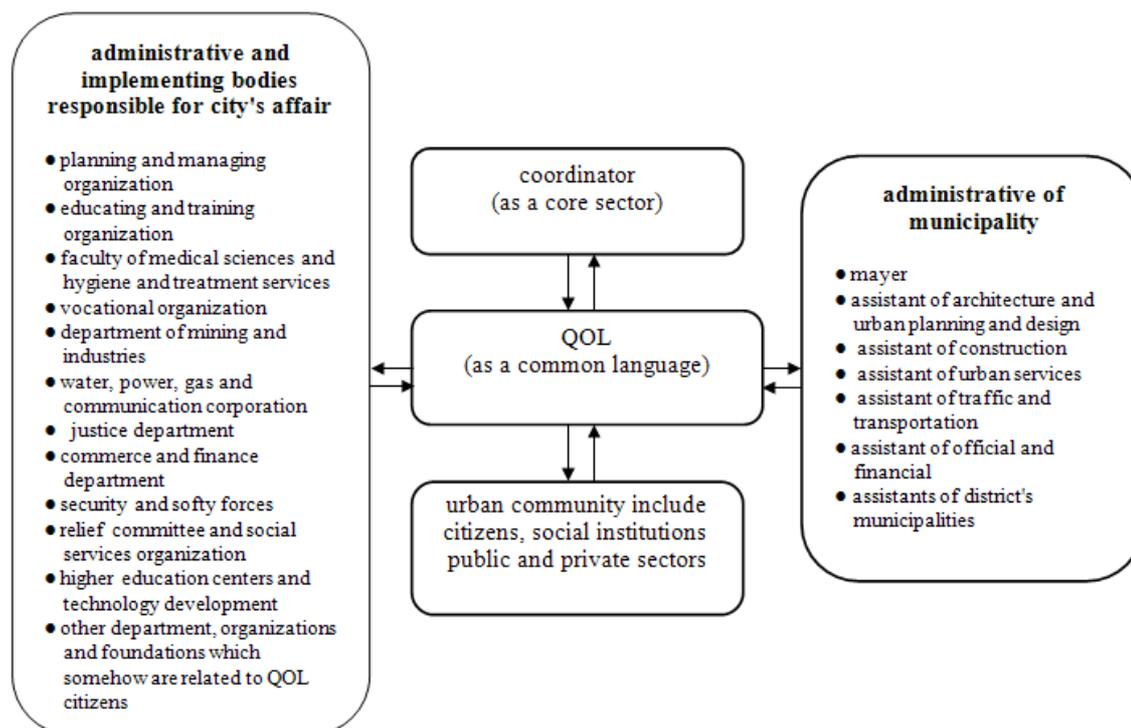


Fig. 5: The QOLRS as a common language to reach consensus in a centralized and sectoral urban planning system, source: author, 2010, for this paper

## 9 CONCLUSION

The concept of QOL can improve the urban planning to achieve community's goals and also create mutual relations between the planning policies and planning organisations within an urban plan-making process. The QOLRS may enable the application of the concept of the QOL. Also undoubtedly it can achieve the urban planning goals and objectives without the need to perform a comprehensive analysis or have a repetitive work. The measures and indicators used in the QOLRS illustrate that in some aspects and in regards to the measures and indicators adopted, the QOL in Esfahan is not satisfactory and there is an urgent need to have more attention being paid to the QOL measures, quality of employment, human resources and community affordability measures and include all these in an appropriate and well-thought urban planning and management system. The problem is caused by failure - on the part of authorities - to notice and make due attention to the different aspects of the QOL in Esfahan and include it in an urban planning and management activity. This, in turn, results from the centralized and sectoral nature of the urban management in this city - and throughout the country - and the lack of local collaboration between the official bodies and all other stakeholders within the urban planning and management domain. One important and initial step to solve this problem is to promote the necessary collaboration between all the stakeholders – including local authorities - and to move towards achieving consistency of measures and coordinated actions. The QOL concept and the established QOLRS can very well work and be used as an efficient tool for efficiency of collaboration and mutual inter-organisational relations to make an integrated urban management.

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