

*Full Length Research Paper*

## North west border cities of Iran and regional development: A case of Kurdistan Province

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There are numerous Iranian provinces in the border area and Kurdistan is the most important regional settlement in North West border line of Iran country. In recent years many transformations have occurred in Kurdish society and its population and area has changed from 350000 people in 1860 to 1,589,222 persons in the year of 2013. Regional development in case study region has a special status and has different situation in compare with other provinces of Iran. In order to, the aim of this paper is evaluation of regional development in Kurdish border cities of Iran with emphasize on Kurdistan province. Applied methodology in current research is based on the descriptive-analytical approach, then by TOPSIS model were determined the ranking of counties in any of the development sections. Results showed that Sanandaj ranked in first and Sarv Abad ranked in 10 among 23 Kurdistan cities (10 main cities and 13 minor cities as subset cities). Also after the Islamic revaluation of Iran Kurdish cities in numerous sections take an accelerated process to access sustainable regional development. Finally we presented some solve ways.

**Key words:** Regional development, regional inequalities, TOPSIS, Kurdistan, Islamic revolution.

### INTRODUCTION

In the last few years the Kurdistan Region has benefited from considerable development in many areas. This was the result of the government's attempts to seize new opportunities to improve the life of the people of the Region. The Kurdistan infrastructure has been damaged by many years of war, genocide and forced displacement at the hand of the previous Iranian regime. For example, the former Iranian regime destroyed over 40 villages in Kurdistan. Thus the Kurdistan Regional Governors have been faced with numerous challenges (Tavakoli and Heydari, 2012). In order to in the last several years have witnessed acceleration and broadening of regional integration processes and many forms of intraregional cooperation. Many of the key policy actions and policy dialogues to address the impact of the multiple food, fuel and financial crises were initiated at the regional and sub-

regional levels (UN, 2011; Ki-moon, 2012). Regional development is the provision of aid and other assistance to regions which are less economically developed. Regional development may be domestic or international in nature. The implications and scope of regional development may therefore vary in accordance with the definition of a region and how the region and its boundaries are perceived internally and externally (Hassani et al., 2013; Davies et al., 2010). Different theories have been proposed so far in the field of development discussions. We proposed some of the most important ones with the purpose of considering the regional and parochial inequalities in the course of growth and development. The neo-regionalist ideology as a reaction to the effects of the contact between local and global processes gave rise to a new regionalism in Europe

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**Table 1.** Trends and the number of urban population in Kurdistan province 1976–2012.

Year	Total population	Annual growth pop (%)	Urbanization index (%)	Urban growth (%)	Rural pop (%)
1976	733939	3	46.7	2.4	53.3
1986	1000324	2.3	54.3	5.4	47.5
1996	1346383	1.45	57	3.5	42.9
2006	1440156	1.1	61	2.8	38.7
2012	1589222	1.4	66	2.9	34.6

The Statistical Center of Iran, restructure and estimate of population according to province (1976–2006).

Source: Note: Statistics Organization of Iran 1976, 1986, 1996, 2006 and estimate of 2012 and Heydari and Tavakoli, 2012.

which directly addresses the questions of state functioning and influence, socioeconomic development, cultural and identity problems as factors in economic development. There is a tendency to re-define the concept of regionalism so as to expose the social and economic rules of a given territory and to relegate folk accents into the background (Wysocka, 2009).

Peter hall also believes that the most important purpose of regional economy policy for reducing its inequalities is providing employment that helps reducing unemployment and emigration in the region and consequently will have its growth and development (Hall, 1992). According to Classical theories, the export activities are fundamental and constitute the economic basis of the region as the demand for goods and services stimulates the region's economic development and shapes its role and distinctive features in the social and spatial division of labor (Jercynski, 1977; Maik, 1997; Matczak and Szymańska, 1997). The new theory of trade valorizes the role of export activities in regional development and explains the mechanisms of benefits in the global economy coming from trade between countries at different stages of development. Answers are sought in the specialization of production in various regions concerning their time and capital consumption. Hence, regions rich in capital, export capital consuming products, while regions rich in labor force export time-consuming products (Grosse, 2002). The center/periphery paradigm continues to function not only in the center of world economy, but also in its peripheries due to a specialized, mobile, international metropolitan class which regardless of race, religion and language, operates on the international labor market. This social group, according to Martin and Schumann's (1999) "a 20:80 society" formula, comprises 1/5 of the society which develops world integration, while the remaining 4/5 are the redundant, ineffective masses, less useful than intelligent technologies. According to the Toffler (1993) the world is divided (with respect to global modernization dynamics) into: 1) the world of the metropolitan class integrated in "info sphere" and "mega corps", 2) the static world of the declining industrial epoch ("industrial rust belt"). The above-mentioned authors predict conflict not between civilizations (like Huntington), but between dynamic and static cultures, in which the former will combat the latter

in a specific "war substitute" (Khammar et al., 2012; Toffler, 1993).

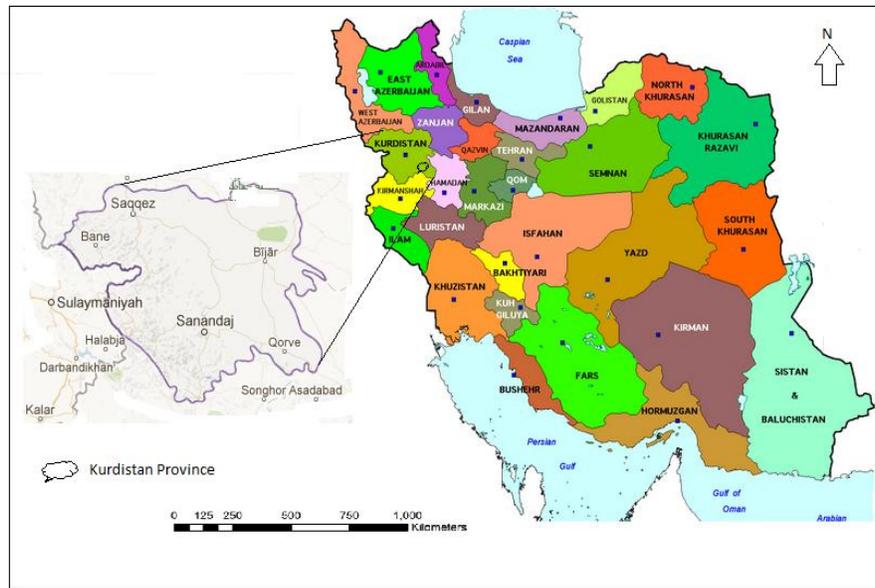
### Changes of population in Kurdish cities

The number of Kurdish cities increased from 6 in 1976 to 23 (10 main cities and 13 minor cities as subset cities) in 2012. In the different National development plans before and after revolution point on increase urbanizations related to industrialization of these urban settlements in these areas. Cerate cement factory in Bijar city was the first step to access this purpose after Islamic revolution and caused the migration of hundreds of thousands of villagers to the cities and also growth of private subdivisions. On the one hand, a cheap workforce for economic activities in cities both in industrial and building services was provided; on the other hand, production and consumption within the villages was subsumed into the urban capitalist economy. During the implementation of these plans, most of the industrial activities in Sanandaj and Saqqez and its surrounding areas have been centralized. In this period, both the urban and the master plan had a great impact on physical changes of Sanandaj city as a big city in Kurdistan province (Figure 2). The foreign engineers and consultants along with their indigenous colleagues with modernizing tendencies tried to make a master plan. As a result, the act of owning apartments was approved in 1996 (Habibi, 1996) (Table 1).

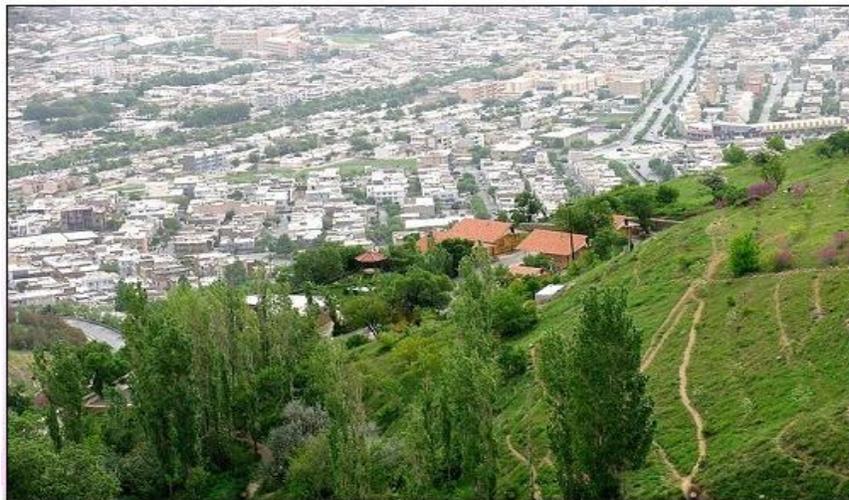
By using 23 indices, Bhatia determined the development level of 380 blocks in 32 regions in 2001. His research results showed that from these blocks, 43 blocks are developed, 187 blocks are relatively developed, 118 blocks are less developed, and 32 blocks were not developed.

### Case study region

Kurdistan province, with an area of 28203 square kilometers, is one of the western provinces of Iran (Figure 1), adjacent to west Azarbaijan, Zanjan, Hamedan, and Kermanshah provinces and borders Iraq, having more than 230 km of shared border with Iraq. The



**Figure 1.** Kurdistan location in Iran.  
Source: Authors, 2013.

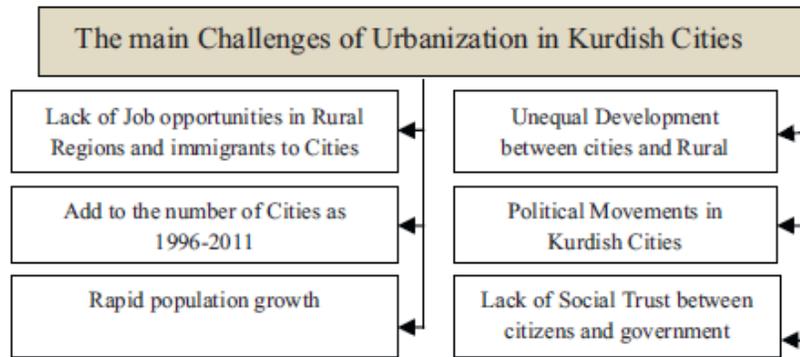


**Figure 2.** A view of Sanandaj (capital city of Kurdistan province).  
Source: Authors, 2013.

Geographical coordinates of the Province are from 34° 44 min to 36° 30 min of northern latitude and from 42° 31 min to 48° 16 min of eastern longitude (Weather organization, 2012). Kurdistan is a roughly defined geo-cultural region where in the Kurds form a prominent majority population, and Kurdish culture, language, and national identity have historically been based. Kurdistan province is the Northwest province of Iran with an approximate area of 98,000 km<sup>2</sup> and a population of 1.7 million. This province has a common border with Iraq and Turkey countries (Kurdistan governor, 2012).

## METHODOLOGY

The research method based on the descriptive-analytical approach. We used the library method for collecting information in order to determine the development degree of the studied counties of this province. According to the importance of indices and its limitations in having access to them, 23 variables collected in the form hygienic – medical and cultural indices. Then by using the TOPSIS model, the ranking of the counties were first determined in any of the development sections and finally determined in the form of differential indices and then obtained results have been analyzed. the TOPSIS technique as one of the MCDM family or today's multi criteria decision making techniques has found a special place in



**Figure 3.** The main challenges of urbanization in Kurdish cities after Islamic Revolution.

Resource: Adapted from Khammar et al., 2012 and Kiani and Heydari, 2012.

ranking the different concept in the different sciences that the most important reason for that is the mathematical and clear logic and also lack of its executive problems. Utilizing some sort of technique in this family (such as hierarchical analysis of data) requires some adjustment in sending and receiving or exchanging the data with the specialists that generally leads to lack of justify ability and dynamism researches due to having no access to the information. However, the TOPSIS method alleviates this problem because it does not make the dual (in pairs) comparison and uses the accurate quantitative ranks. Additionally, multiplicity of criteria in the compared units also leads to the problems in decision making by using the general techniques that in any event such problems do not exist in the TOPSIS technique. Finally, being compensatory and with the aim of offering the reasonable and appropriate ranking with the mental or subjective inference of specialists justifies using this powerful technique (Asgharpoor, 2002; Heydari and Fanni, 2013). The hypothesis of the current research is: It seems that there is a significant difference among the urban areas of Kurdistan province based on the development degree in having access to hygienic, medical indices.

## RESULTS

### Development challenges in Kurdistan province of Iran

Based on the results in anticipation of the local, regional and international socio-economic changes characterized by continued change and large-scale interaction, a number of immediate and future challenges have been identified (Figure 3). This RDS (Regional Development Strategy) seeks to address these challenges, most important of which are:

1. Relative deficiency in the structure of economic sectors, reflected by their contribution to GDP, the contribution made by the agricultural sector is 10%, tourism 4.9%, industry 6.6%, and commerce 4.9%. These contributions are relatively low, compared with other sectors, like services (14%) or real estate ownership (14%), leading to extreme exposure of economy to the

outside world as a natural result of these low contributions to GDP generation, particularly commodity sector contributions totaling only 11% of commodity activities, while distribution activities and services activities reached 65% and 24% respectively, based on 2008 statistics.

2. Lack of clear strategic planning vision in relation to state budget preparation, this is especially evident during the selection of priorities, due to the adoption of the conventional policy (line-item budget) which focuses on immediate needs only.

3. Failure of the Region's economy to generate sufficient job opportunities due to the decline of investment expenditures out of overall public expenditure, leading to widespread unemployment among working-age population in general and youngster group in particular (rate of unemployed females was higher than males) as a consequence of poor response of employment policy, on the one hand, and the negative effect of urbanization on the employment trends, on the other, despite the fact that numbers of the latter group out of numbers of the former group is high. Statistical figures indicate that manpower is concentrated on non-commodity businesses at the expense of commodity businesses, which led to its multiplicity.

4. Poor competitive capability of vegetable and animal production at both foreign and local levels.

5. Paucity of local and foreign investments in the industrial sector in general, and in manufacturing industries in particular, making local industrial production clearly unable to compete against imported goods.

6. A prerequisite for comprehensive reform of the education sector rests with providing sufficient funds. This requirement must be a top priority in this Strategy, which demands increased financial allocations and sufficient funds for improving the quality of provided education, addressing non equitable educational distribution between urban and rural areas in addition to treating inadequate accommodation capacities of the

existing buildings for all educational levels, represented in declining ability to provide complete and sustainable education opportunities.

7. Sufficient attention must be accorded to pre-academic, academic, and post graduate curricula development, ensuring that these curricula's are in conformity with the current scientific developments and changes, and meeting the demands for libraries, laboratories and technical educational aids.

8. Demographic changes among districts happening as a consequence of increased migration from the rural areas and villages to the cities constitute a challenge for implementing needed health policy. This is perhaps due to unavailability of a clear and adopted population policy. Increased population growth leads to increase in the demand for health services.

9. Number of private and joint-stock investment companies in the field of tourism and culture is very low as they are restricted to individual investors with limited capacities which are incompatible with large-scale tourist and cultural investment projects. This situation has also been associated with limited financial resources earmarked by the government for these activities, where allocated funds are used for few areas. This may be attributed to multiplicity of authorities responsible for activities related to tourism, culture and antiquities, as there is overlapping in duties and responsibilities among them. In addition, lack of sufficient supplementary services and infrastructural facilities, especially at tourist attraction sites, like religious, archeological and entertainment areas, represents another hindrance.

10. The challenges related to the traditional culture of women's participation in the economic activities represent a major obstacle and a main reason for the declining involvement of females in the economic development process. This situation is attributed to the existing social values and traditions which are responsible for identifying women's roles, in addition to the negative attitude females' employment in economic activities outside household confines, and preparing them instead for taking up traditional family roles like matrimony and motherhood. Discrimination against women is the most negatively affecting cultural and traditional factor (Statistical National center of Iran, 2006, Heydari and Kiani, 2011).

### **Spatial development**

1. Allotting at least 50% of the state investment budget for development of services and major infrastructures at the districts, sub-districts and rural areas, proportionate with their population size, degree of deprivation in the past decades, and their particularities.

2. Increasing local and foreign private investment by at least 10% of overall invested annual capitals, at the less developed areas, achieved through a series of incentives

proposed by BOI in cooperation and coordination with the government stakeholders.

3. Annually Selecting 10 villages with appropriate population number in accordance with scientific approaches to provide services programs and infrastructures for rural areas.

4. increasing potable water distribution services through safe networks by an annual rate of 10% for the under-privileged areas and quarters (particularly at the rural areas).

5. reducing water resources contamination caused by industrial waste water by 15% per year,

6. Promoting decentralization with regard to management of development facilities and private sector involvement in plans and programs designing at the level of governorates, municipal councils of districts and sub-districts, Private sector will also be encouraged to participate in governorates' development projects which represent viable investment opportunities (Authors adopted Kurdish NGO document, 2012).

### **Health and medical parameters**

Health care is a vital service that daily touches the lives of millions of Kurdish peoples at significant and vulnerable times: birth, illness, and death. In recent decades, technology, pharmaceuticals, and know-how have substantially improved how care is delivered and the prospects for recovery. Kurdish markets for innovation in pharmaceuticals and medical devices are second to none. The miracles of modern medicine have become almost commonplace.

Quality, efficacy, efficiency, accessibility and viability of health-care services depend primarily on the performance of those who deliver them (Bennett and Franco, 2002). In order to make improvements, it is necessary to understand the elements that influence provider and organizational performance, and consider the full range of possible interventions (Lande, 2002). Engender (2003) summarized and adapted this in terms of the following three main needs: facilitative supervision and management; information, training and development; and supplies, equipment and infrastructure. Despite the improving health status of the Kurdish population, healthcare infrastructure in Kurdistan has a long way to go towards achieving 100% quality, technology and superior healthcare delivery systems (Figure 4). While the Central Government is limited to family welfare and disease control programs, the state governments (Governorates) are responsible for primary and secondary medical care with a limited role in specialty care. Looking at the healthcare indicators and the growing prevalence of non-communicable lifestyle related diseases, both the government and private sector, realize the need to meet this basic demand. Today, the private sector provides 30% of the healthcare service in

**Table 2.** Trends and the number of urban population in Kurdistan province 1976 to 2012.

Cities	Mosque	Theatre and Cinema	Public library	Khaneqa	Schools	Education Dep	Universitites	Teachers	Religious camps
Kamiaran	132	1	3	1	121	10	1	300	0
Divandareh	131	2	1	1	42	12	2	580	1
Bijar	175	1	4	1	147	14	3	1003	1
Saqqez	750	4	6	3	430	54	4	2410	5
Sanandaj	1132	20	14	12	600	220	6	4610	12
Qorveh	412	2	3	1	35	32	1	234	0
Dehgulan	214	1	2	0	36	14	1	241	12
Bane	34	1	2	0	74	9	2	140	13
Sarv Abad	5	1	1	1	3	3	0	40	1
Marivan	472	3	14	34	250	314	3	1145	16

Resource: Authors, 2013.

Kurdistan (Figures 5 and 6).

### **Cultural indicators**

The concept of culture is ambiguous and perhaps even problematic. In this paper culture is perceived in two ways. Firstly there are broad definitions of culture. Culture can be seen as a set of attitudes, practices and beliefs or values and customs that are fundamental to the functioning of societies. In this sense the concept of culture is part of a sociological or anthropological framework. Culture is something that contributes to the shared elements of human experience (Throsby, 1999). Alternatively, as Bennett (1999) puts it: culture is all those factors that form the experience of living. Kainulaim (2005) points out that if we define the concept of culture in this way it cannot be reached analytically. However we can see this broader definition of culture as the background to a narrower interpretation of culture. The broader definition has more to do with methodology and analysis and the narrower interpretation of culture helps to specify the object of interest and research (Kainulaim, 2005). Geertz (1973) suggested that culture is 'an historically transmitted pattern of meanings embodied in symbols, a system of inherited conceptions expressed in symbolic form by means of which men communicate, perpetuate, and developed their knowledge about attitudes toward life' (Geertz, 1973). Hofstede (2001) defines culture as 'the collective programming of the mind which distinguishes the members of one group or category of people from another.' On the other hand Schein (2010) defines organizational Culture as the shared values, beliefs, norms, expectations and assumptions which function like a glue holding employees and organization's systems together and stimulating employees. Culture is both the context for development as well as the missing factor in policies for development although such interactions have long been recognized as essential,

there has been no worldwide analysis in this field on which new policies could be based. The independent World Commission on Culture and Development (WCCD) was therefore established jointly by UNESCO and the United Nations in December 1992 to prepare a policy-oriented report on the interactions of culture and development.

In case study region culture indicators have a weak position. In this research we have defined some of these indicators (Mosque, Theatre and cinema, public Library, Khaneqa, schools, education department, Universities, teachers and Religious camps) in Table 2 and Figure 7. Then data's were analyzed by Excel and SPSS. Results show that in between Kurdish cities of Iran Sarv Abad regard to studied parameters was in lowest level. Also Sanandaj and Saqqez were in first (1132, 20, 14, 12, 600, 220, 6, 4610, 12) and second (750, 4, 6, 3, 430, 54, 4, 2410, 5) place.

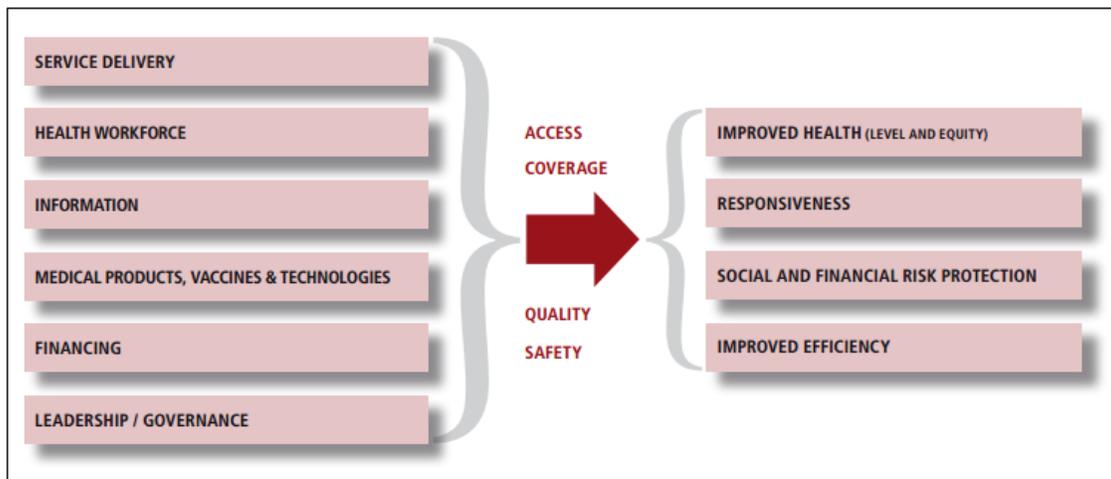
### **Conclusion**

For more than three decades (from 1976 to 2012) the urban population Kurdish cities of Iran has been the greatest growth and thus urban population has grown up to four times as much as the rural population. In these years, the annual growth rate of the urban population has been 4.3% and the rate of annual growth of the rural population has been 1.3%. In contrast to those developed countries in which urbanization had been evaluated with structural changes in economy and production, urbanization changes in Iran generally and Kurdistan especially have not been caused by the improvement and betterment of economic and social functions and the methods of production; rather they have been caused by the high income gap between economic sectors and the unavailability of work to rural dwellers. Therefore, whereas the growth of urbanization has not been a result of the evolution and perfection of economic and social relations

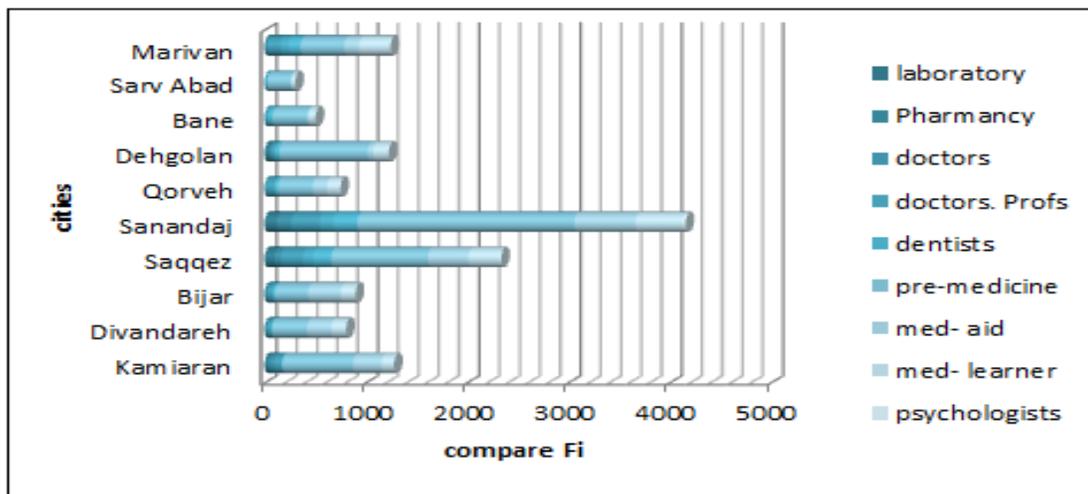
**Table 3.** Ranking of cities in Kurdistan province in different sectors in the year 2013, based on measurements of TOPSIS model.

S/N	Cities	Health and medical parameters		Cultural indicators	
		Rank	Priority	Rank	Priority
1	Kamiaran	7	0.312	7	0.279
2	Divandareh	8	0.247	6	0.314
3	Bijar	4	0.480	5	0.348
4	Saqqez	2	0.652	2	0.543
5	Sanandaj	1	0.712	1	0.550
6	Qorveh	5	0.447	3	0.478
7	Dehgolan	6	0.330	8	0.271
8	Bane	9	0.140	9	0.175
9	Sarv Abad	10	0.45	10	0.32
10	Marivan	3	0.580	4	0.420

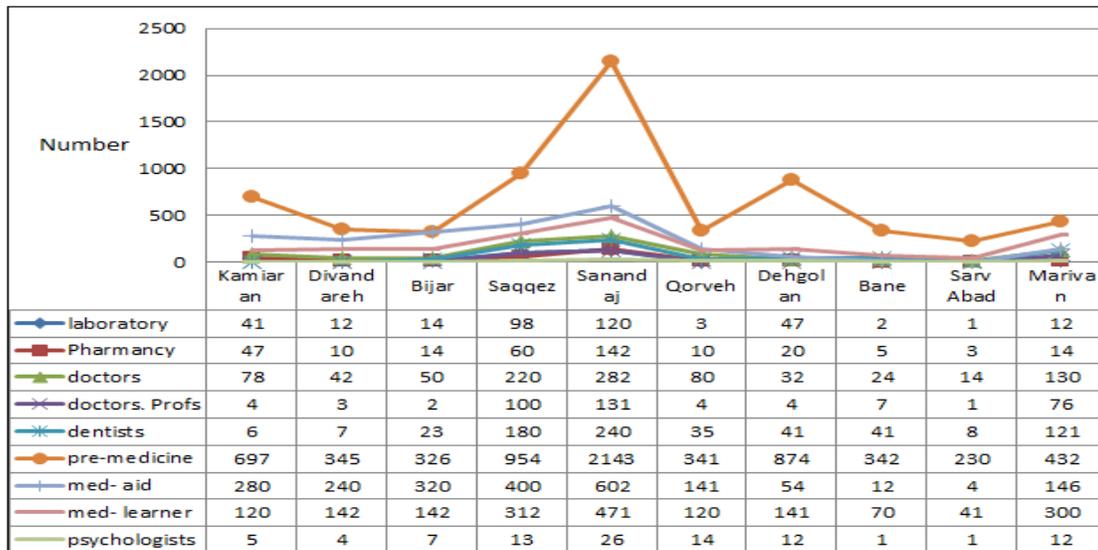
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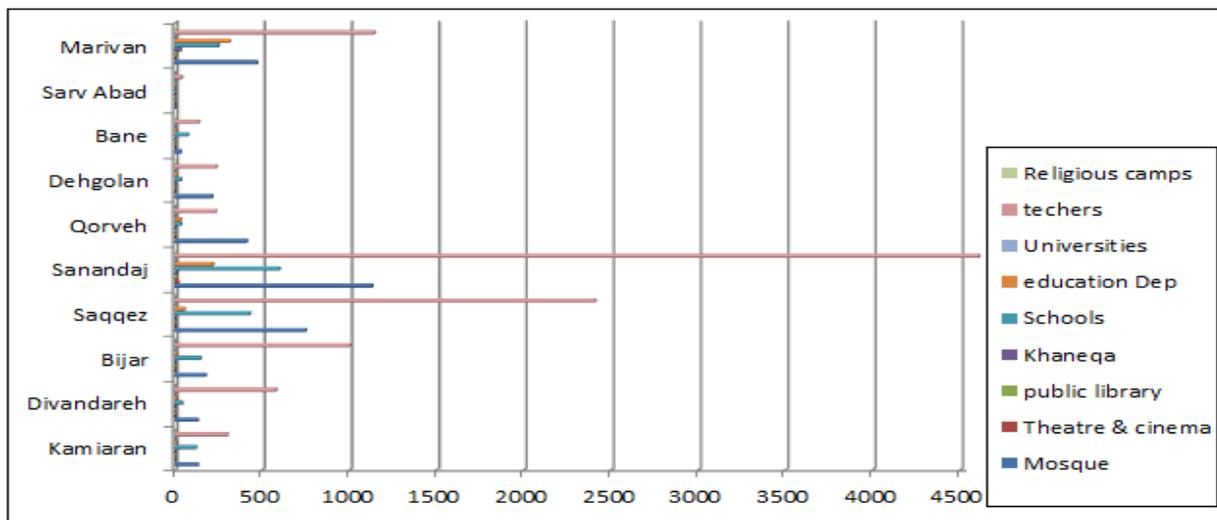
**Figure 4.** The Six building blocks of Health system.  
Resource: UN, 2013.



**Figure 5.** Compare the health system status in Kurdish border cities of Iran  
Resource: Authors, 2013.



**Figure 6.** The number of health facilities in Kurdish cities per 1000 persons  
Resource: Authors, 2013.



**Figure 7.** The number of health facilities in Kurdish cities per 1000 persons  
Resource: Authors, 2013.

and has not necessitated national development, it is not imagined as an index or criterion of development, progress arising from the economic structure.

To give ranks to different economic, social and cultural sectors there are different methods that necessarily do not have similar answers. One of the methods of ordering is the TOPSIS method (Table 3). Here, by this technique, cities in Kurdistan based on underlying indices were ranked according to their level of development and then the degree of inequality in distributing facilities and sources were clarified through the method of distribution coefficient. The results of the research show that in the

year 2012 the city of Sanandaj ranked 1 and the city of Sarv Abad ranked 10 in the province of Kurdistan and the obtained distribution coefficient was 0.6 that itself shows a difference and the intensity of inequality in using the benefits of development. Based on the measurements done and the obtained results the hypothesis suggesting the difference and inequality in developing levels among the province cities is approved. Therefore, considering spatial programming, studying cities based on the level of development and identifying underdeveloped spots to make solid programming and suggesting accurate and performing guidelines with the goal of the tendency to the

development and progress and balanced regional development is an unavoidable necessity.

## SUGGESTIONS

We can suggest some functions for urban management in the urban system Kurdish regions of Iran to play more acceptable role in regional development process and strategies:

1. Decentralization policy and giving more attention to less developed province such as Kurdistan.
2. Development of regional markets, supply networks and export in less developed provinces.
3. Improvement and development of infrastructural service especially transport system in periphery areas.
4. Notice to the social, cultural and economic progress with other dimensions because these basic parts not take apart of each other in regional development process.
3. Improving cultural- social infrastructures of border regions accordance with their capabilities.
5. Increasing local and foreign private investment in less developed areas of Iran in generally and Kurdistan especially.
6. Accurate and performing guidelines with the goal of the tendency to the development and progress and balanced regional development in border cities.

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