

## **An Analysis of Regional Inequalities in West Azerbaijan with Emphasis on Socio-Cultural Factors**

**Mahdieh Nakhaei<sup>1\*</sup>, Karim Hoseinzadeh Dalir<sup>1</sup>, Hosein Ali Khamri<sup>2</sup>, Abdullah Doosti<sup>3</sup>, Mehrdad Abbasian<sup>3</sup>**

<sup>1</sup>Department of Geography and Urban Planning, Marand branch, Islamic Azad University, Marand, Iran; <sup>2</sup>Peyame Noor University, Yazd Branch, Department of Physical Geography Major climate, Yazd, Iran; <sup>3</sup> Islamic Azad University, Zahedan Branch, Department of Geography and Urban Planning, Zahedan, Iran

\*E-mail: Zahedan.6336@gmail.com

### **Abstract**

Reducing the imbalances, logical and rational utilization of the environmental power, optimal distribution of resources and population, systemic view of the towns and villages, and recognition of the inequalities between settlements are among the most important tasks of regional planning. Hence in this study we are going to investigate socio-cultural factors in the towns of West Azerbaijan through Factor and Cluster Analysis technique and also utilizing 21 Indices. The research is Applied- Developmental and to study the data, descriptive analytical method is used. Applying factor analysis led to divide the towns into four levels, advantaged, relatively advantaged, deprived and highly deprived. The findings indicated that Khoy town got the first place with a score of 3.47 and Chaldoran town got the 17th place with a score of -3.25 among 17 towns of West Azerbaijan in which 23.52 % of the towns were in advantaged level, 35.29 % were in relatively advantaged level, 23.52 % were in deprived level, and 17.64 % were in relatively deprived level. Finally, using cluster analysis and diagrams of Dendrogram, the towns were classified into homogeneous groups. Overall, the findings showed the differences and inequalities in the enjoyment of the towns' socio-cultural factors. Thus, considering local and regional planning in order to eliminate inequalities and equitable distribution of resources, services, population, is essential to the development of the province.

**Keywords:** development levels, regional inequalities, factor analysis, cluster analysis, West Azerbaijan province

### **Introduction**

Development has been considered as a purely economic issue and different countries considered it only from this aspect. In other words, economic development is the only criteria considered in the development of any society. And the prevailing thought was that the goals of a developed society could be achieved thanks to the different patterns of economic development, technology development, wealth accumulation, etc. But gradually, one way look to development and the overemphasis on economic, caused social and environmental problems for the developed countries. On the other hand, unconscious uses of the model developed by some countries, affected the harmonious development of the countries adversely. These problems were drawn from the key role of culture to strengthen the society which was neglected. It can be said that human culture as a treasure of material and spiritual achievements which has created the beliefs, values, attitudes and norms accepted by the society throughout history, specifies the people's behavior in the society. Obviously you cannot do changes in various aspects of society without paying attention to this important issue. Because any change in all aspects of society including economic, political, social and cultural depends on cultural acceptance in the society. Thus, without the cultural context,

development in other aspects of society cannot be achieved. Hence, the concept of cultural development attracted the attention of many international organizations such as UNESCO in recent years.

### **Statement of the problem and significance of the study**

Nowadays, the necessity to further regional planning is inevitable due to the differences among villages, cities and villages, cities and cities, regions, within regions, regions and countries in order to achieve an acceptable national and international minimum in terms of economic, social, physical, needs of national and regional investment, population maintenance among the land area and the use of appropriate technology and achieve sustainable development (Ziari, 1999). Reducing inequalities and removing social and economic dichotomy as a fundamental prerequisite for achieving the development is one of the regional planning goals. Imbalance between regions during development causes gaps and intensity of regional inequality, which leads to barriers in their development. Accordingly, the investigation of economic, social, educational, welfare, regional and provincial inequalities is one of the essential and basic actions for planning and reforms in order to meet economic development with social justice and reforming the spatial arrangement of national and regional economy configuration. It can affect the allocation of resources to remove regional inequalities (Hosseinzadeh, 2001).

Over the past years, researchers using data and quantitative methods with mainly economic nature, failed to determine the growth and development at the international, national, regional and local levels (ibid, 152). Development levels are measured by international organizations and economists with different Indices. One of the most common indices is per capita income. Accordingly, regions with relatively high per capita income are considered as developed (Pomferet, 1997). Although the index is defensible due to being objective and away from personal and arbitrary comments however, because it does not involve non- monetary values and things that cannot be converted into monetary values, cannot be considered as the only criteria of the developed areas. Thus from 1960 onwards the combined Indices and other uneconomic Indices such as Indices of the cultural, social, health care development was provided. Since culture is one of the most important factors in the development of any country; cultural development is the basis of any development; the government's main concern is to achieve comprehensive development; the basis of this development is human (cultural entity); cultural development will be the fundamentals of real and lasting development (Asadpour, 2008).

Rate of advantages or access to cultural resources and their optimal distribution in the countries and cities are really important and Iran as one of the developing countries in terms of having different Indices of development has a wide range of variation and cultural Indices are as one of the aspects of the geographical distribution of heterogeneity among provinces and cities and West Azerbaijan province is not an exception to the heterogeneous situation.

### **Hypotheses of the study**

H<sub>0</sub>: there are strong social inequalities among the towns of West Azerbaijan province in terms of the cultural facilities and services.

H<sub>1</sub>: there is a direct relationship between the rates of urbanization the towns of West Azerbaijan province and their development in the field of socio-cultural.

### **Research Objectives**

This study aims to investigate the differences and inequalities between various towns for having socio-cultural Indices; ranking the towns in terms of enjoyment of the Indices and whether

they have a good position in terms of access to socio-cultural facilities and services in the province; and which one was in the deprived level in order to improve their cultural situation through regional development planning to direct national development potentials.

### **Literature review**

Culture had been studied long time ago in the world, but in recent decades, it has been common to study the culture with new perspectives. Culture and development were first presented in UNESCO. With the idea of cultural development in 1950, the decade 1950-60 was famed as the first decade of development. In the decade 1960-70, new concepts and words such as cultural development and cultural policy were common in the field of culture in the European countries (UNESCO, 1975). In 1970, the first conference attended by representatives of 85 countries in the field of culture held in Venice. Since then culture, cultural development, cultural planning, cultural policy, cultural economics and cultural studies have been begun in UNESCO, and culture like training was considered as Inseparable part of economic and social development and cultural institutions were created in the formation of the organization(Sattari, 1975).

In the world conference in Mexico City in 1982, the concepts and definitions of culture and development, and cultural aspect of development and cultural development were descriptively and analytically investigated, and culture was detected as the necessary element of the development. In this conference, neglecting cultural Indices was considered as a development failure and development process was considered as a cultural change. In the conference, a ten-year period was proposed as the world decade for cultural development and was officially approved on 8 December 1986 in the UN General Assembly and started (UNESCO, 1980). In 1980 in UNESCO, in the case studies of local research projects, cultural characteristics of a particular environment in order to meet pure economic perspective was considered as a hinder of the development and cultural development was proposed as the most dynamic element in the societies project (Archity, 1991). The term of culture was more named as self-knowledge and later applied to educational matters in the past centuries. In the first development plan (1948-1955) and the second (1955 -1962), culture was referred to the educational affairs and there was no independent chapter known as culture in the two plans. Culture involved cultural activities in primary, secondary and higher education in the third plan (1962-1967) and artistic and cultural activities as well. In the third plan, the Ministry of Culture was divided into the two Ministry of Education and the Ministry of Culture and Art. In the first to fifth plans (1948-1977), although the cultural planning was considered but the dimensions of cultural development was neglected in it. In the first plan of the Islamic Republic of Iran (1989-1993) and the second (1995-1999) and third (1999-2004 ) socio-economic development plan of the Islamic Republic of Iran, the concept of cultural development was defined as cultural planning and the concept of culture referred to the growth and development of human and improving individual and collective quality of life. In different Conferences on sociology and development in 1991, and cultural development and religion- culture and development in 1998, and cultural approach to geography in 2000, theoretical, descriptive, and analytical aspects of culture and cultural development were more emphasized (Ziari, 2000). Masoodian (1993) in a research on the world cultural Indices, proposed cultural development in small size and called the circulation of newspapers, books, magazines, journals, libraries, paper production, paper consumption, number of theater, film, television and radio transmitters number, education, the arts and the museum as its Index. In this study, high levels of each Index in compare to the similar figures, is a sign of cultural development (Masoodian, 1993). Taghvaei and Ghaedrahmat (2006), in research on the cultural development of the results founded that there is a significant difference among the country

provinces in terms of the utilization of spaces and cultural facilities and cultural inequities among the provinces lead to adverse consequences.

### **Methodology**

The present study was analytical and quantitative research and its governing approach was developmental. The sample consisted of 17 towns of West Azerbaijan Province and data extracted from the Statistical Yearbook of the province (2009). To standardize the indices and their analysis, factor analysis method was used. The towns were ranked through combined score then classified into homogeneous groups through the cluster analysis. Finally, to improve the towns' cultural and social strategies were presented.

### **Theoretical Foundations**

Since the end of World War II "development" as one of the major issues have been discussed in academic circles and Planning of countries, so that by the 1990s, most countries reconsidered their position on this issue. The institutions associated with the development attempted to determine the degree of economic and social development, of countries through applying some indices and specific patterns. But the important issue is the concept of development has had no fixed meaning and in recent decades has been changed. Most of the theories which have been proposed in the 1950s and 1960s, introduced development as the achievement of higher rates of economic growth (Todaro, 1990). However, by criticizing these theories in 1970, the concept of development was defined as the reduction or elimination of poverty, unemployment, inequality, making fundamental changes in social attitudes. In the new concepts of development, the ways for human contributions and the aspects of his life were considered and concluded that its main content is providing basic needs and improving people and community life conditions. Since the concept of development is widespread, we believe it means to make the potentials of individuals and society active. Culture as well as development has a variety of definitions and concepts. Culture was described like science, knowledge, literature, education, training, books, art, and scientific literature of a nation in Amid dictionary (Amid, 1971). Husserl believed that culture is the combination of different subjectivity of human experiences (Tavassoli, 1991). In a statement in Mexico in 1982, the elements of culture, including beliefs, fundamental human rights, value systems, lifestyle, arts, and literature were indicated. UNESCO experts defined cultural development as promoting cultural development efforts related to the creation, focusing on the arts, encouraging the production of handicrafts, art education, public participation, developing the role of books, reading, literacy, scientific publications, press, copyright compliance, internal production, cultural heritage, developing cross-cultural interactions, understanding cultures, exchanging public education and information, and publishing great masterpieces (ibid, 14). Various theories have developed different attitudes toward culture. Followers of modernization theory confirmed the significant role of culture in the creation of new values and believed that the community does not develop unless the majority of the community accepts the new values. Followers of human capital theory believed that national development lies in human capital. Thus, culture is a productive investment (Masoodian, 1993). By examining various theories in the field of cultural development we can express its concepts in quantitative Indices which most of them were introduced in the section of presenting the variables.

### **Geographical location of West Azerbaijan province**

West Azerbaijan province is one of the 31 provinces of Iran's located in the region of Azerbaijan in the northwest of the country and its capital is the city of Uremia. This province is located in northwest Iran and is surrounded to Azerbaijan and Turkey from north, to Turkey and Iraq

from west, to East Azerbaijan and Zanjan provinces from east, and to Kurdistan province from south. Its area is 37.059 square kilometers which is considered as the thirteenth largest province in the country and covers% 25.2 of the country's total area. According to the 2006 census the population of West Azerbaijan province was 2,873,459 people which % 4.08 of the total population of the country are located there and in this term is considered as the eighth most populous province in the country. West Azerbaijan province is a mountainous region in the country and has various and wide topography. Based on its natural structure, unique ecosystems have been created through combining of plants at different levels of vegetation in different levels of topography in which the forests and pastures are more significant. The province is largely influenced by the moist Atlantic air and Mediterranean Sea, but in some winter months, cold air masses from the north influence its Mediterranean climate and decrease the temperature significantly.

### **The models used in the study**

#### ***Factor Analysis***

Factor analysis is a technique of data and variables reduction which is trying to divide a collection of variables into groups of variables that are most correlated. And finally, classified and divided a large number of variables into a small number of variables, called factor (Lee and Lee, 2011). Factor analysis can be used in various applications. If the goal of factor analysis is to summarize the number of Indices into the significant factors, R-type factor analysis should be used. If it aims in combining and summarizing a number of places and geographical areas in homogeneous groups within a country, Q factor analysis should be used. In geographical studies, R factor analysis is more used to rank the cities, towns and villages (Hekmatnia and Musavi, 2006). In addition, factor analysis can be effectively used to apply the data and reduce the possibility of error in a situation where theoretical judgment is needed (Asayesh and Estelaji, 2003). Also, factor analysis provides the basis for cluster analysis and specifies the development levels of the towns. Factor analysis involves the following steps: data matrix, calculating the correlation matrix, factors extraction, factor rotation, naming factors, and the towns' ranking (Hekmatnia and Musavi, 2006).

#### ***Clustering Analysis***

This is one of the most widely used methods in the study of regional geography. In fact, it is used for grading regions, cities, towns, villages, etc., so that at this classification, the places at the same levels are highly similar to each other, but significantly different from places in the other levels. Classification of homogenous places in this procedure is done in different ways. Determining the correlation coefficient and distance measurement, especially Euclidean distance are the most important methods in changing the homogeneous places. So there are various ways to combine elements into clusters, one of which is a hierarchical cluster analysis carried out using density separation (Bayat, 2009). In the condensation technique, each issue or subject begins with its own cluster and then the two issues get combined to make a new condensation and cluster. Therefore, the number of clusters is decreased in each step one by one. In some cases, the third issue is combined with a cluster and creates a new cluster and two groups or issues may be combined and create a new cluster. Thus gradually merge all these together and ultimately create a large cluster. If clustering process was done in the reverse direction of hierarchical method, in fact the resolution method was used. Five main methods to create dense clusters are as follow: single linkage, complete linkage, average linkage, Ward's method, center of gravity method (Kalantari, 2010).

#### ***Indices***

For assessing the towns enjoyment from amenities and cultural services, some indices were used which are directly identified as socio-cultural indices or the ones which indicate the level of cultural development of the towns. A total of 21 indices were selected as follows.

$X_1$ : the % of urbanization,  $X_2$ : the number of mosques per ten thousands population,  $X_3$ : the ratio of boy students in high school,  $X_4$ : the ratio of girl students in high school,  $X_5$ : the ratio of boy students to the whole educational courses,  $X_6$ : the ratio of girl students to the whole educational courses,  $X_7$ : the ratio of teaching staff to the whole number of office staff,  $X_8$ : the ratio of non-teaching staff to the whole number of office staff,  $X_9$ : the number of cinemas per five thousands population,  $X_{10}$ : the number of theaters per five thousands population,  $X_{11}$ : the number of exhibitions per five thousands population,  $X_{12}$ : : the number of publications per five thousands population,  $X_{13}$ : the number of libraries per five thousands population,  $X_{14}$ : the number of books available in the libraries per ten thousands population,  $X_{15}$ : the ratio of institutes to the elementary school students,  $X_{16}$ : the ratio of classes to the elementary school students,  $X_{17}$ : the ratio of institutes to the junior high school students,  $X_{18}$ : the number of classes to the high school students,  $X_{19}$ : the number of institutes to the high school students,  $X_{20}$ : the ratio of classes to the high school students,  $X_{21}$ : the ratio of institutes to the pre-University students.

#### ***Application of factor analysis in the evaluation of the socio-cultural environment of West Azerbaijan towns***

After converting the selected variables into the statistical indices, 21 statistical indices in different sections were identified suitable for factor analysis and factor analysis technique was done by SPSS software. The stages of factor analysis were applied for the Socio - cultural indices of 17 towns of West Azerbaijan province. Among the methods that researchers are able to determine the suitability of data for factor analysis is the KMO test whose value is always fluctuated between 0 and 1. If the value of KMO is less than %50 data is not appropriate for factor analysis and if the value is between %50 and %69, factor analysis needs to be done more carefully. But if the value is more than %70 correlations in the data are suitable for factor analysis (Kalantari, 2010). The results of KMO test indicates that the adequacy of the model is confirmed and indicated the suitability of the factor analysis model for the operation of the present study and Bartlett's test also confirmed this.

#### ***Data matrix***

Data matrix is a matrix whose columns consist of indices and rows consist of regions. So, in West Azerbaijan province, socio-cultural indices are put in the matrix columns and the 17 towns are put in the matrix rows.

#### ***Calculating the correlation matrix***

The correlation matrix is used for calculation and relationship between indices in the next stages. If all indices were arranged in a positive direction and much quality indicated better situation, correlations would be positive. That increases with increasing values of each index values will be different. It means the values of each index will be increased by increasing the values of the other indices. The correlation between the index  $m$  can be written as  $m \times m$ . With 21 indices for West Azerbaijan province, the matrix will be  $21 \times 21$ . Diagonal values are all 1 and the numbers under the diagonal are repeating the numbers above the diagonal because, the index correlation, with the index of 1 and the correlation of index 2 to 1 is always equal to the correlation of index 1 with index 2 (Hekmatnia & Musavi, 2006).

#### ***Factors extraction***

In this section, the correlation between indices (variables) and factor was evaluated and by using the correlation matrix, the main factors were extracted. So the correlation matrix was calculated and the factors extraction was done. To provide reasonable and appropriate relationship between indices (variables) and factors, the indices were used whose correlation coefficients are above %5 (Taghvaei & Shafie, 1388). Accordingly, in the present study 21 Indices decreased to 4

factors that explains the variance of 75.340, and represents the satisfaction of factor analysis, and the indices studied. The results are shown in Table 1.

**Table 1. Final factors extraction analysis of data**

List of factors	Eigenvalues	Of variance%	Of cumulative variance%
1	7.189	34.235	34.235
2	3.601	17.148	51.383
3	2.896	13.792	65.175
4	2.135	10.166	75.340

Source: The author's studies

#### **Rotation matrix**

If the index were on a factor and the loaded values of each index were big and positive or close to zero, it would be easy to interpret the factors. If the loaded values of each index include average values on several factors, it would be difficult to interpret the factor. To achieve the ideal condition, such factors were rotated to obtain simple structure. Varimax, Koarimax, and Ekmarks methods can be used for factor rotation (Musavi & Hekmatnia, 2005). A simple structure is obtained in this study that many factors come around a factor and according to table 1; the extracted factors explain 75.340 % of changes due to the previous variables (Taghvaei & Shafie, 2009). By data matrix, correlation matrix was calculated then by factor analysis; the socio-cultural indices are decreased to 4 final factors which explained 75.340 % of variance. And shows a good summary in which the variables of each factor were identified by the factor rotation through Varimax method. According to the table 1, the first factor had more effect on the whole changes (variance).

**Table 2. Rotated factors**

List of factors	Eigenvalues	Of variance%	Of cumulative variance%
1	5.267	25.079	25.079
2	4.765	22.690	47.769
3	3.103	14.778	62.548
4	2.686	12.793	75.340

Source: The author's studies

#### **Naming factors**

According to the correlation of each index, factors were named as follows. According to the correlation of each index with each other, those with more correlation are loaded in the same factor.

**Table 3. Loaded indices in first factor**

No.	Index	Number of rows in calculations	Correlation
1	the number of mosques per ten thousands population	X2	0.703
2	the ratio of institutes to the junior high school students	X15	0.901
3	the ratio of classes to the elementary school students	X16	0.726
4	the ratio of institution to the junior high school students	X17	0.901
5	the number of classes to the high school students	X18	0.564
6	the ratio of institution to the high school students	X19	0.804

Source: The author's studies

**First factor**

Eigenvalues of the factor justified 5.267 and 25.079 % of variance. In this factor, 6 indices with more correlation among them are loaded in which one index is institutional and five of them are school indices. Therefore, these factors can be called (institutional and school).

**Second factor**

Eigenvalues of the factor is 4.765 which justify 25.079 % of variance. In this factor, 5 correlated indices are loaded in which 3 indices are institutional and 2 of them are literacy indices which can be called (institutional and literacy).

**Table 4. Loaded indices in second factor**

No.	Index	Number of rows in calculations	Correlation
1	the ratio of boy students in high school	X3	0.745
2	the ratio of boy students to the whole educational courses	X5	0.901
3	the number of theaters per five thousands population	X10	0.795
4	the number of libraries per five thousands population	X13	0.602
5	the ratio of institutes to the pre-University students	X21	0.668

*Source: The author's studies*

**Third factor**

Eigenvalues of the factor justified 3.103 and 14.778 % of variance. In this factor, 3 indices with more correlation among them are loaded in which 2 indices are institutional and one of them is school indices which can be called (institutional and cultural).

**Table 5. Loaded indices in third factor**

No.	Index	Number of rows in calculations	Correlation
1	the ratio of classes to the junior high school students	X18	0.504
2	the ratio of classes to the high school students	X20	0.803
3	the number of books available in the libraries per ten thousands population	X14	0.679

*Source: The author's studies*

**Fourth factor**

Eigenvalues of the factor justified 2.686 and 12.793 % of variance. In this factor, 2 indices with significant relationship are loaded in which can be called (institutional and personnel).

**Table 6. Loaded indices in fourth factor**

No.	Index	Number of rows in calculations	Correlation
1	the number of exhibitions per five thousands population	X11	0.663
2	the ratio of none-teaching staff to the whole number of office staff	X8	0.933

### Towns ranking

After conducting the above stages, the towns were ranked through factor scores measured for each of them. Ranking the towns by the use of combined scores indicates that Khoy town with the score of 3.47 is the most advantaged and Chaldoran with the score of -3.25 is the most highly deprived town in the field of socio-cultural. The third factor was effective for the mentioned result for Khoy and the second factor was effective for the resulted mentioned for Chaldoran. Table 7 shows the towns ranking of West Azerbaijan province based on factor scores.

**Table 7. The towns ranking of West Azerbaijan province based on combined scores**

No.	Town	Score of each factor				Combined score	Rank
		First factor	Second factor	Third factor	Fourth factor		
1	Uremia	0.30565	0.28683	0.37684	0.63541	1.60	4
2	Oshnavieh	-0.27311	-0.51761	1.52590	0.14878	0.88	6
3	Bukan	0.54468	2.18663	-0.08801	0.76549	3.41	2
4	Poldasht	-0.38014	-0.79402	-0.14673	0.43951	-2.29	15
5	Piranshahr	0.69245	0.01455	-0.24525	-0.35090	0.11	8
6	Takab	0.04998	0.65205	0.34329	-1.62658	-0.58	11
7	Chaypareh	-1.07668	0.03840	-0.14218	-1.42312	-2.6	16
8	Chaldoran	-0.80865	-1.19432	-0.62716	-0.61791	-3.25	17
9	Khoy	1.43224	-0.71708	2.05421	0.70205	3.47	1
10	Sardasht	0.30407	-1.08014	0.34258	0.50751	0.07	9
11	Salmas	-0.57132	1.02461	-0.81987	-1.35922	-0.09	10
12	Shahindej	-0.43659	-0.57834	-1.70779	1.47797	-1.24	13
13	Shoot	0.69245	-0.89765	-0.52345	-0.10237	-0.73	14
14	Maku	-1.14504	-0.11579	0.94319	1.80685	1.49	5
15	Mahabad	-0.12931	2.15866	-0.82853	0.71493	1.92	3
16	Miandoab	2.84495	-0.51721	-1.12220	-0.72288	0.48	7
17	Naghadeh	0.45554	-0.32376	-0.07510	-0.27881	-1.13	12

Source: The author's studies

### Grouping the towns of West Azerbaijan province by the use of cluster analysis

After conducting factor analysis based on the extracted scores and combined indices, homogenous groups of the towns of West Azerbaijan province were determined by the use of cluster analysis technique. The towns with the most equality based on factor scores were classified in the same cluster in a way that score values of each factor indicate the importance of each region. In the cluster analysis, the towns of the province were arranged in three levels based on average link. This arrangement expressed the places in the same levels were more similar to each other but significantly different from the places of the other levels.

According to the collected data, the towns of Uremia, Bukan, Khoy, Maku, and Mahabad were in group one and the towns of Oshnavieh, Piranshahr, Takab, Sardasht, Salmas, Shahindej, Shoot, Miandoab, and Naghadeh were in group two and the towns of Poldasht, Chaypareh, and Chaldoran were in group three. By the end of the extracting factors stage, the combined scores were obtained through the sum of factor analysis and each of the towns were divided into the certain groups based on the scores they received from development values. According to the mean and standard deviation of combined scores, four levels were considered for

the towns and each of them were put in the levels of advantaged, relatively advantaged, deprived and highly deprived, based on the scores they obtained

**Table 8. Classifying the towns of West Azerbaijan province by the use of factor analysis**

No.	Level	Towns	Number of	%	Development level
1	Level 1	Uremia, Bukan, Khoy, Mahabad	4	23.52	Advantaged
2	Level 2	Oshnavieh, Piranshahr, Maku, Sardasht, Salmas, Miandoab	6	35.29	Relatively advantaged
3	Level 3	Shoot, Miandoab, Naghadeh Takab, Shahindej	4	23.52	deprived
4	Level 4	Poldasht, Chaypareh, Chaldoran	3	17.64	Highly Deprived
<b>Total</b>			17	100	

*Source: The author's studies*

Therefore, the difference in the classification of the towns is due to the inequities in the enjoyment of the socio-cultural indices in a way that the four towns of Uremia, Bukan, Khoy, and Mahabad with 23.52 % were in the advantaged level; Oshnavieh, Piranshahr, Maku, Sardasht, Salmas, and Miandoab with 35.29 % were in the relatively advantaged; Shoot, Miandoab, Naghadeh, Takab, and Shahindej with 23.52 % were in the deprived level; and the towns of Poldasht, Chaypareh, and Chaldoran with 17.64 % were in the highly deprived level. Thus,  $H_0$ : there are strong social inequalities among the towns of West Azerbaijan province in hypothesis was confirmed.

The results also show if the rate of urbanization goes up, the rate of awareness and access to the cultural facilities including cinemas, institutions, exhibitions, literacy, etc. similarly go up. This issue was examined by Pierson test. Since the measured significance level ( $\text{sig}=0.002$ ) is less than the expected significance level ( $\alpha=0.05$ ), the hypothesis 1 "there is a direct relationship between the rates of urbanization the towns of West Azerbaijan province and their development in the field of socio-cultural" was confirmed and the relationship between the two variables is 0.685 which indicates the positive and strong relationship between them. Table 9 shows the results of Pearson test.

**Table 9: Investigation of the relationship between the rates of urbanization and their development in the field of socio-cultural**

Test	Significance level	Correlation coefficient	Expected Alfa
Pierson	$\text{sig}=0.002$	0.685	$\alpha = 0.05$

*Source: The author's studies*

### Discussion and conclusion

The findings of factor analysis model confirms that the towns of West Azerbaijan province are not similar in terms of their enjoyment of socio-cultural facilities and services and show significant differences among them and also most of the towns in terms of socio-cultural facilities and services are not in ideal levels. In the field of culture in the towns, the lack of cinemas and related equipment, theaters, holding book fair, and publications are significant while these services are concentrated in some specific towns. Accordingly, the Index related to the age of literacy, people

with higher education, number of books in the library and the number of mosques are relatively available at the appropriate level in the all towns. Approximately 41 % of the towns of the province are deprived and highly deprived in terms of access to cultural facilities and services and approximately 35.29 % of the towns of the country are in the average levels in terms of access to cultural facilities and services and only 52.23 % of the towns are in the enjoyment of present status indices in the province which means the potentials of the towns have not been used. Comparing the two figures exclude 41 % deprived and 52/23 % advantaged, indicating an unequal distribution of cultural facilities and services at the regional level which means the potentials of the towns have not been used. Due to the deprivation of the majority of the towns from cultural facilities and services and the planners and managers' direction towards economic development and their neglect of the deprivation cultural development, issues and problems will be established in the province as follows:

1. Creating a deep gap in the cultural dichotomy among the towns of the province, 23.52 % of them are in higher levels and the rest are in the top –down levels, none are compatible with each other.
2. Intensifying the migration to provincial centers and continuing marginalization and subsequently increase in the problems of urbanization including unauthorized construction, social problems, spreading false jobs and etc., while solving the problems of marginalization is difficult for the urban planners and managers.
3. Prevailing injustice in the distribution of resources and cultural services, while urban and regional planning is a requirement of justice.
4. The tendency towards centralization and pole orientation, while centralism is on the agenda of the regional planners.
5. All of the above will affect economic development, but the way out of economic problems is in the foundations of cultural programming.

Since nearly 65 % of the towns of the province in terms of access to facilities and cultural services have been in down order, and on the other hand, some of the cultural facilities and services are concentrated in some certain towns, to decentralize in this issue and in order to move towards the path of sustainable development, and in terms of social justice elements, the deprived towns should be the first priority for development in regional planning. Since finding strategies for economic development is always considered by planners and managers in this field, on the other hand cultural development is the basis for economic development, it seems necessary for the planners to consider the balanced cultural development as the first priority, and in order to enhance cultural promotion, it is necessary to give cultural services such as organizing book fair, cinema and theater halls, publications in the centers of population gravity, based on the eve of the population of each town, and the concentration of excessive cultural facilities and services in some specific towns should to be avoided.

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