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REGIONAL INEQUALITIES, A VIEW ON THE SOCIAL-CULTURAL SECTION OF WEST AZERBAIJAN (MIANDOAB TOWNSHIP)

¹Mohammad Moeinfar and ²Bashir Beik Babaei*

¹Islamic Azad University, Ajabshir Branch, Ajabshir, Iran

²Islamic Azad University, Malekan Branch, Malekan, Iran

*Author for Correspondence

ABSTRACT

Nowadays, regional inequalities, in terms of poor planning in developing countries are observable. Reducing the level of inequalities, principal and logical utilization of environmental powers, optimal distribution of facilities and population, studies on cities and villages with a systemic view and identifying the degree of inequalities among settlements including important duties of regional planning. Therefore, the present study is to investigate West Azerbaijan and Miandoab using factor analysis technique and cluster analysis technique as well as 21 indices in the social-cultural grounds. The method of the research was descriptive-analytical. The result of applying factor analysis was dividing townships in 4 enjoying, relatively enjoying, deprived and very deprived. The findings of the research indicated that Miandoab has obtained the seventh rank with the score 0.78 among 17 townships of West Azerbaijan Province, which in other regions, 26.3 of cities were at the enjoying level, 35.29 percent were at the relatively enjoying, 23.52 percent were at the deprive level, and 17.64 percent of townships were at the very deprived level. Finally, using cluster analysis and drawing dendrogram graph, the townships were categorized into homogenous groups. In sum, the findings indicate the difference and inequalities of townships in enjoying the social-cultural indices. Therefore, paying attention to regional planning in line with eliminating inequalities and distributing justly the facilities and developing the province is a vital and necessary issue and requires particular planning.

Keywords: *Miandoab, Factor Analysis, West Azerbaijan*

INTRODUCTION

Nowadays, sustainable development is a basic issue in line with decreasing inequalities and was considered a merely economic concept for a long time and different countries considered it only from this perspective. In other words, economic advancement is considered the only criterion of development of each society and the dominant thought was that using different models of economic development, the technological growth and cases including the objectives a developed society could be obtained, but gradually, one-dimensional view to development and over-emphasis on economic issues caused the occurrence of problems in social and environmental domains for developed and advanced countries. On the other hand, using this model of development by some countries is negatively effective on the development of the countries. These problems originate from the being negligent to the key role of culture in reinforcing a society. It can be said that the culture as a treasury of material and spiritual achievement of human beings-which created beliefs, values, attitudes and norms accepted by a society during history-determines the type of people's behaviors in the society; therefore, without creating the proper cultural ground, the realization of development in other dimensions of a society cannot be pursued. Therefore, during recent years, the concept of cultural development has attracted much attention of world societies including UNESCO.

Statement of the Problem

By viewing the state of inequalities in different regions, it is found out that nowadays the differences between villages, between villages and cities, between cities and cities, among regions, intraregional differences, differences between regions and countries to achieve a minimum and acceptable level of national and international development in terms of economy, science, physical dimensions, the necessity of national and regional investment, and maintaining population on the lands and using appropriate

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technologies and achieving sustainable development all have rendered the necessity of regional planning highly inevitable more than ever. One of the objectives of regional planning is to reduce inequalities and eliminating economic and social dualism as one of the main pre-conditions to achieve development. Imbalances among the developing regions have resulted in creating gaps and intensity of regional inequalities which is a barrier on the path of development. Accordingly, the study of economic, social, educational welfare regional and provincial inequalities is one of the necessary and basic measures for planning and reforming to supply economic growth along with social justice and reformation of spatial arrangement of national and regional economy. This issue can influence the allocation of resources with the objective of eliminating regional inequalities. Measuring the development level by international organizations and economists is conducted with different indices. One of the common indices is the per capita income. Accordingly, the regions which relatively enjoy high per capita income are considered as developed (Pomfret, 1997).

Although the mentioned index due to the fact that is objective and free from personal values and judgments, is defensible. But due to the fact that it cannot cover non-monetary values and cases that are able to become monetary, is considered as the only criterion of the development of regions; as a result, since 1960's, combined indices and other noneconomic indices such as indices of cultural, social, and healthcare development were presented. since culture is one of the important and basic components in developing each country and the basis of each kind of development is cultural development, and also the main concern of states in attaining comprehensive development, and since the basis of this development is human beings, the foundation of sustainable development is called cultural development which can realized through planning.

Research objectives

The objectives of the present study are to investigate the inequalities between different townships in terms of enjoying social-cultural indices and ranking townships in terms of the degree of enjoying mentioned indices and plan to reduce inequalities.

Literature Review

The issue of regional inequalities is a serious one and for the first time, the issue of culture and development was presented in UNESCO. By announcing the idea of cultural development in 1950, 50's was famous as the first decade of development. In 60's, in European countries, new concepts and words such as cultural development and cultural policy were presented. In 1970, the first conference on culture was held in Venice with the participation of the representatives of 85 countries. Since holding this conference, the concepts of culture, cultural development, cultural planning, cultural policymaking, cultural economy and cultural research was presented in UNESCO and culture such as education was considered as the inseparable part of economic and social development and cultural institutions was constructed in its organization.

MATERIALS AND METHODS

The aim of selecting a research method is that the researcher can identify what method he should select in order to achieve the answers of the questions more accurately, simply and quickly. This issue depends the executive facilities, nature, objective and topic of that research. Therefore, the present study is from the analytical and quantitative method and its dominant approach is developmental. The population of the study includes 17 townships of West Azerbaijan Province; therefore, using the statistics book of the province and to standardize the indices and analyzing them, factor analysis was used. Then, townships were ranked using combined scores and then through cluster analysis were classified and levelled into homogenous groups.

Studied Indices

To evaluate the degree of enjoying each township from the cultural facilities and services, indices were used that either directly were identified as social-cultural indices or indices which indicate the level of cultural development of the township in one way or another. In sum, 21 indices were selected which are as follows:

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X_1 - urbanization percentage X_2 - The number of mosques per ten thousand population X_3 - the ratio of secondary school male students to high school ones X_4 - the ratio of secondary school female students to high school ones X_5 - the ratio of male students to all education courses X_6 - the ratio of female students to all education courses X_7 - the ratio of teaching staff to the whole office staff X_8 the ratio of non-teaching staff to the whole office staff X_9 -the number of cinemas per each 50 thousand population X_{10} - the number of theaters per each 50 thousand population X_{11} - the number of fairs per each 50 thousand population X_{12} - the number of printeries per each 50 thousand population X_{13} -the number of libraries per each 50 thousand population X_{14} - the number of present books in libraries per each 10 thousand population X_{15} - the ratio of schools to elementary school students X_{16} the ratio of classrooms to elementary school students X_{17} the ratio of classrooms to secondary school students X_{18} - the ratio of classrooms to secondary school students X_{19} - the ratio of schools to high school students X_{20} the ratio of classrooms to high school students X_{21} . the ratio of schools to pre-university school students.

The application of Factor Analysis

After changing the selected variables into statistical indices, at last 21 statistical indices were identified in different sections for factor analysis and the analysis was conducted using SPSS software program. The steps of factor analysis for social-cultural index were applied I 17 townships of the province.

Among the methods which the researcher by which is able to determine and identify the appropriateness of the data for factor analysis is KMO whose value is ranging from 0 to 1. In case that the value of KMO is smaller than 0.50, the data are not appropriate for factor analysis and if its value is between 0.50 to 0.69, with more caution should conduct factor analysis. But in case that its value is bigger than 0.70, the correlations between the data is appropriate for factor analysis. The results of the KMO test indicate that the quality of the model is relatively acceptable and this issue indicates the appropriateness of factor analysis for the present research and also Bartlett's test confirms this issue.

Extracting the Data

In this section, the correlation between indices (variables) and factors are investigated and using the correlation matrix, the main factors are extracted. Therefore, the correlation matrix is calculated and the extraction of factors is conducted. To create a logical and proper relationship between indices (variables) and factors, indices are used which their correlation coefficients are bigger than 0.5. Accordingly, in the present study, 21 indices are reduced into 4 factors by which 75.340 percent of the variance is explained and indicates the satisfactoriness of factor analysis and studied indices. The results are showed in table 1:

Table 1: Extracting final factors of analyzing the data

List of factors	Particular values	Variance percentage	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

Rotation of the Matrix

If each branch is loaded on a factor, or the loading values of each index in the factor is big and positive or near to zero, the interoperation of factors will be simple. In case that the loading values of each index include the moderate values on some factors, the interpretation will be difficult. To attain the favorable state, factors are rotated in such a way that reaches a simple structure. To rotate factors, Varimax, co-varimax, and Equimax methods can be used. In the present study, a simple structure is obtained which many factors are gathered around a factor, which according to table 1, extracted factors explain 75.340

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percent of variations due to previous variables. By constructing the data matrix, the correlation coefficient of matrix is calculated and then by factor analysis of social-cultural indices, they are reduced into 4 final factors which in sum explains 75.340 percent of variance and indicates a favorable summary which by rotation of factors using Varimax, the variables of each factors are identified. Regarding table 1, the first factor has a greater role in the total of variations.

Table 2: Rotated factors

List of factors	Particular values	Variance percentage	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

Naming the Factors

Regarding the degree of correlation of each of the indices with each other, that set of indices which has the most correlation with each other are loaded in a factor.

The first factor: the specific value of this factor is 5.267 which explains 25.079 percent of the variance. In this factor, 6 indices are loaded which the most correlation is among them. In this factor, 6 indices are loaded which one is institutional and 5 are scholastic. Therefore, this factor can be called scholastic factor.

Table 3: Loaded indices in the second factor

Row	Index name	Number of rows in calculations	correlation coefficient
1	The number of mosques per ten thousand population	X2	0.703
2	The ratio of schools to the students of secondary school	X15	0.901
3	The ratio of classrooms to the students of primary school	X16	0.726
4	The ration of schools to the students of secondary school	X17	0.901
5	The number of classrooms to the students of secondary school	X18	0.564
6	The ration of schools to the students of high school	X19	0.804

Resource: the researchers

Table 4: The loaded indices in the second factor

Row	Index name	Number of rows in calculations	correlation coefficient
1	The ratio of male students to the high school	X3	0.745
2	The ratio of male students to the whole academic levels	X5	0.901
3	The number of theaters per each 50 thousand population	X10	0.795
4	The number of libraries per each 50 thousand population	X13	0.602
5	The ratio of schools to pre-university school students.	X21	0.668

Resource: the researchers

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The second factor: in this factor, 5 indices are loaded among which there is correlation. The specific value of this factor is 4.765 which explain 22.690 percent of the variance. In this factor, the index 3 is an institutional and the index 2 is literacy index. This index can be called the literacy-institutional factor.

The third factor: in this factor, 3 indices are loaded, which has the most correlation with each other. The specific value of this factor is 3.103 which calculates and explains 14.778 percent of the variance. This factor has two scholastic indices and one cultural index. It can be called the cultural and scholastic factor.

Table 5: Loaded indices in the third factor

Row	Index name	Number of rows in calculations	correlation coefficient
2	The ratio of classrooms to secondary school students	X18	0.540
3	The ratio of classrooms to high school students	X20	0.803
4	The number of available books in libraries per each 10 thousand population	X14	0.679

Resources: the researchers' studies

The fourth factor: the specific value of this factor is 2.686 which explains 12.793 percent of variances. In this factor, there are 2 loaded indices having significant correlation with each other. It can be called the institutional and personnel factor.

Ranking Townships

After conducting the mentioned stages, the townships were ranked using the factor scores calculated or each of the townships. The ranking of townships using combined scores indicates that Khoy with 3.47 scores is the most enjoying and Chaldaran with -3.25 is the most deprived townships in the cultural-social section. The third factor is effective on the enjoyment of Khoy and the second factor is effective on the deprivation of Chaldaran.

Table 6: Indicate the ranking of the townships of the province with factor scores

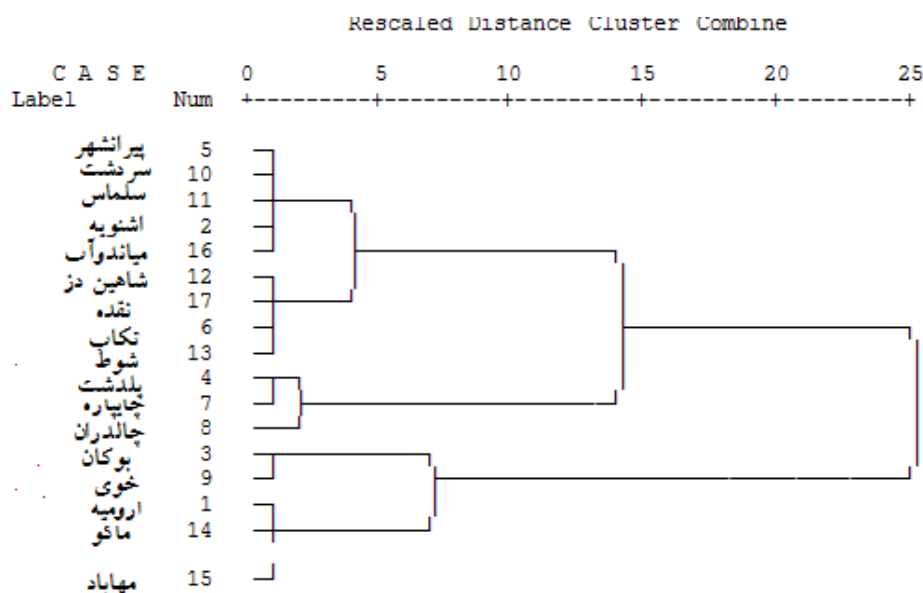
Row	Township	1 st factor	The score of each factor 2 nd factor	3 rd factor	4 th factor	Combined score	rank
1	Orumiyeh	0.30565	0.28683	0.37684	0.63541	1.60	4
2	Oshnaviyeh	-0.27311	-0.51761	1.52590	0.14878	0.88	6
3	Bukan	0.54468	2.18663	-0.08801	0.76549	3.41	2
4	Poldasht	-0.38014	-0.79402	-0.14673	0.34951	-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	Chaldaran	-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	shahindezh	-0.43659	-0.57834	-1.70779	1.47797	-1.24	13
13	Shout	0.69245	-0.89765	-0.52345	-0.10237	-0.73	14
14	Makou	-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	Naghadah	0.45554	-0.32376	-0.07510	-0.27881	-1.13	12

Resource: the researchers' studies

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Grouping Townships using Cluster Analysis

After doing the stages of factor analysis, based on the extracted scores and combined index, using the technique of cluster analysis, the homogenous groups of townships were determined. Using this method, townships having the most homogeneity in terms of factor scores were grouped in a cluster, in this way that the values of the scores of each factor indicated the degree of importance of each of these regions. Graph 1 indicates the townships of the province in 3 homogenous cluster. This leveling indicates that the places in a level have very many similarities.



Graph 1: Grouping the townships of West Azerbaijan Province using cluster analysis

Based on table 1, the townships of Orumiyeh, Bukan, Khoy, Makou, and Mahabad were placed in the first group, Oshnaviyeh, Piranshahr, Takab, Sardasht, Salmas, Shahindezh, Shout, Miandoab, and Naghadeh in the second group, Poldasht, Chaypareh, and Chaldaran in the third groups. after finishing the extraction of the factors, using the sum of the factor scores of each township, the combined score was obtained and each of the townships were classified into certain groups based on the scores which they obtained from development. regarding the mean and standard deviation of the combined score, four classes were defined for classification of townships and each the townships was put in one of these 4 enjoying, relatively enjoying, deprived and very deprived classes based on the scores which they obtained form factor analysis.

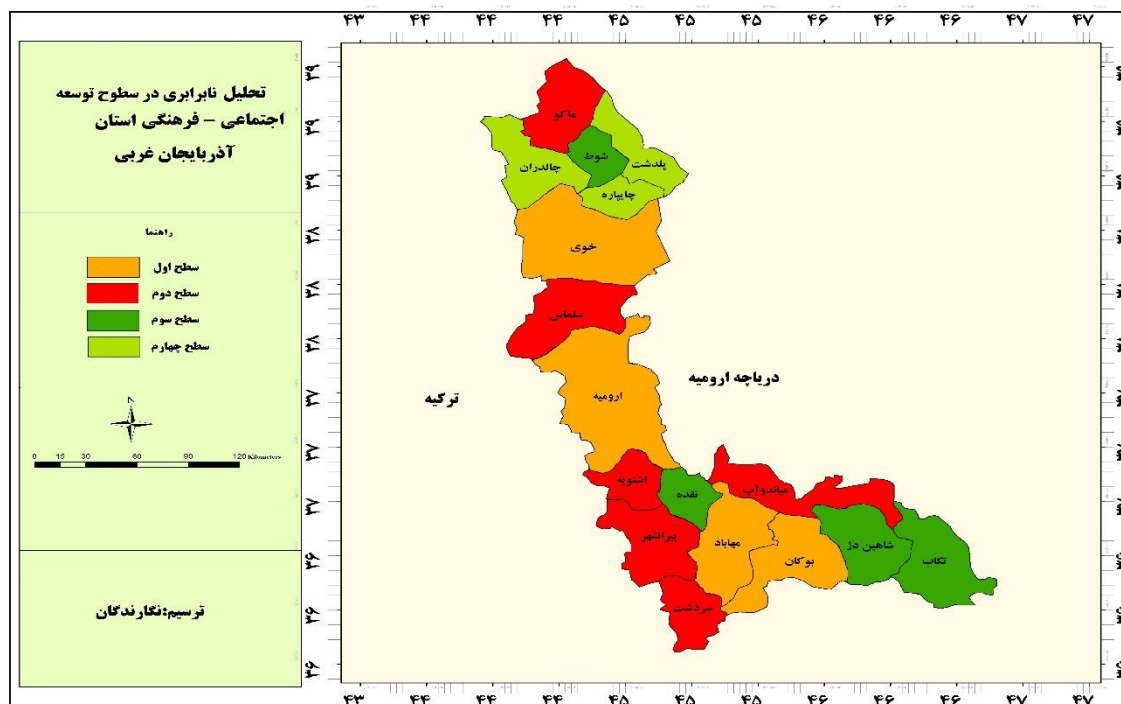
Table 7: Leveling the townships of West Azerbaijan Province based on factor scores

Row	Level name	Township	Number	Percent	Development level
1	1 st level	Orumiyeh, Bukan, Khoy, Mahabad,	4	23.52	Enjoying
2	2 nd level	Oshnaviyeh, Piranshahr, Sardasht, Salmas, Makou, Miandoab	6	35.29	Relatively enjoying
3	3 rd level	Naghadeh, Shout, Shahindezh, Takab	4	23.52	Deprived
4	4 th level	Chaldaran, Poldasht, Chaypareh	3	17.64	Very deprived
Total			17	100	

Resource: the researchers' calculations

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Therefore, this difference in the classification of townships indicates the difference and inequalities in enjoying social and cultural indices in such a way that the four townships of Orumyeh, Bukan, Khoy and Mahabad with 23.52 percent of enjoying level, Oshnaviyeh, Piranshahr, Sardasht, Salmas, Makou, Miandoab with 35.29 percent are in the relatively enjoying level, Naghadeh, Shout, Shahindezh, Takab with 23.52 percent in the deprived level and Chaldaran, Poldasht, Chaypareh with 17.64 percent are in the very deprived level. Therefore, the hypothesis claiming that there is difference among townships in terms of social and cultural indices is confirmed.



Map 1: Indicates the leveling of the townships of West Azerbaijan Province

In addition, the results indicate that the more the percentage of urbanization, the more the degree of knowledge and access to cultural facilities such as cinemas, schools, fairs, literacy and etc. this issue was investigated through Pearson correlation test. Regarding the significance level ($\text{sig}=0.002$) is less than the desired significance level ($\alpha=0.05$). Therefore, this hypothesis is confirmed, in other words, the more the urbanization level increases, the more the access to facilities causes the development and desirability of indices and the correlation between these two variables is direct and about 0.685 which indicates the positive and strong correlation between these two variables.

Discussion and Conclusion

The findings of the research indicate that Miandoab Township among the townships of West Azerbaijan Province in terms of enjoying level has not a desirable status. Approximately, 41 percent of the townships of the province are deprived or very deprived in terms of enjoying cultural facilities and services, and about 35.29 percent of the townships of the province, in terms of enjoying cultural facilities are in a moderate level and only 23.52 percent are in an enjoying level. Comparing two figures of 41 percent of deprived level and 22.52 percent of enjoying level indicate the unequal distribution of cultural facilities and services in regional level and this means that the available potentials in townships have not been used.

- The creation of a deep gap and cultural dualism among the townships of the province, 23.52 percent of the townships are in higher level and in the others in higher to lower levels, which are not homogenous.
- The intensity of migrations to the capitals of the townships and the continuance of suburbanization and consequently the increase in issues and problems of urbanizations including illegitimate constructions,

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social damages, the commonness of fake jobs and cases like these, while the elimination of suburbanites is complicated for urban planners and managers.

- The tendency toward centralization and polarization, while centralization is considered by regional planners.
- All mentioned cases cover economic development, while the solution of eliminating economic challenges of planners is in cultural foundations. Regarding the fact that 65 percent of the townships of the province are from enjoying level to lower levels in terms of enjoying cultural facilities and services, and on the other hand, cultural facilities and services are centralized in some of the townships, to de-centralize, in this issue and to move on the path of sustainable development, and considering the component of social justice, regional planning should be prioritized in deprived townships.

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