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Review of Level of Development with Emphasis on the Livestock Industry (Case Study Lorestan Province)

Farhad Zand[1], Kamran Noori[1] and Nasrin Babaeinezhad[2*]

1- Department of Social Science, Payame Noor University, Iran.
2- Geography Student in Department of Social Science, Payame Noor University

***Corresponding author*:** Nasrin Babaeinezhad

ABSTRACT: The development process in developing country has been believed to be based on rural development as an underlying necessary for national development. Agricultural section plays a great role in strengthening the economic based of these countries. This research was carried out to determine the role of animal breeding in the development of Lorestan. The classification of regions was based on numerical taxonomy with is major indexes of livestock. The results show that KhorramAbad and Koohdasht stand at the first and second rank of development with 0.42604 and 0.43390 as the most development cities and Azna and Doroud are the most undeveloped cities at 0.86384 and 0.87454.

***Keywords*:** Rural Development, Livestock Industry, Numerical Taxonomy, Lorestan.

INTRODUCTION

The 21st century started when rural development programs confronted with different problems which must be saved with suitable solutions. Based on World Bank report in 2006, more than 70% of world hungers were rural (World Bank: 2006). This report adds world rural population will decrease from the year 2005 to 2010 from 51.4% to 49.5%. The rural migration cycle to cities and poverty dominating the villages show that the previous strategies were not successful and could not provide the food security and environment sustainability. This has caused problems in the world, and has become the subject of rural development .Development process in developing countries, made it clear that rural development is essential for national development and institutional development programs should be a priority .Rural development and subsequent national development plans is possible at present only through sustainable development.

One of the aspects of sustainable development is rural development which can be improving the quality of life for rural communities to increase plant and animal products, reducing the incidence of migration to the city and even reverse migration, unemployment and increasing social security, economic and cultural context of the society and macro level of the country.

Rural development in Iran has been considered in planning and implementation of various strategies, but our experience over the past 30 years shows that these strategies have not been very successful.

On the other hand, lack of coherent strategic vision of rural development among specialists has led the village and rural development to be unsuccessful in view of the consistency and effectiveness. Although there has been a centralized routine of programming in the country, the development rate cannot be observed in the province of Lorestan and there are a lot of problems in central cities of the province, especially in the city of Khorramabad.

Consequences of underdevelopment in rural areas such as widespread poverty, growing inequality, rapid population growth, unemployment, migration, poor people like them, have attracted the attention to rural development. (Todaro, 1987).

In the degree of development of the city of Azerbaijan in the period 1987-1977 Dehghan believes that improving development in urban areas is greater than that in rural areas and the development gap between the city

and the province is very high , so that the disparity between cities of province are greater than ,disparities between the provinces of the country (Dehghan, 1995).
Studies of Saraki, (1995) to determine the degree of development in the city of Kermanshah Province during the period from 1977 to 1987 show there is reduction of inequalities in the cities of the province (Saraki, 1995).
Zarand et al (2007) ranked cities of Khorrasan in terms of development of the province between the years 1998 to 2008 , and obtained the results throughthree methods of the taxonomy , the main component analysis method and APA .

AminiNezhad et al, (2008) in their study paid attention to analyze the degree of development of rural areas in South Pars gas field, with the use of models of numerical taxonomy and Morris, considering 65 social and economic indicators at the district level for the year 2006. For the reviewand analysis of inequalities in rural development, the dispersion coefficient of variation index was used. The results showed that 4.15% of villages were in the privileged group , 5/38% in a semi-privileged , 6.41% of villages in disadvantaged groups .

Molaei, (2008) compared the degree of development of the agricultural sector of Iran during 1994 and 2004 The results show that the level of agricultural development in Iran has not changed much over the years, but inequality coefficient increased 7.18 %.

Sepehrdoost, (2008), based on infrastructure, education and health ,tried to measure the degree of development in the rural areas of Hamedan province, and then compared the performance of the program during the Third Development Plan .He used the method of numerical taxonomy and factor analysis .Comparing the coefficient of variation showed that during 1999 to 2994 , with positive effects on the development of the Plan, there appeared a more balanced distribution of resources in infrastructure, education and health care city's rural patients.
Badri et al, (2006) analyzed the level of development of rural areas of Kamyaran .The results showed that the rate of development between the villages of kamiaran varied and inequality and differences are high .Out of seven districts of the city , a district was undeveloped, 5 districts were developing and one was underdeveloped . (Badri et al 2006).

Zand, (2006),in his master's thesis , investigated the central district of Malayer having two privileged districts and two semi privileged districts and one underprivileged.

MATERIALS AND METHODS

Geographical location of the province: Lorestan is the western province of Iran. Lorestan is neighbor with Provinces of Markazi and Hamedan to the north, with Khuzistan to the south, with Isfahan to the East and with provinces of Kermanshah and Ilam to the west. Province is located at latitude 32 °, 37 ' to '34 °, 22' North and longitude 50 °, 30' to 51°, 46' east.

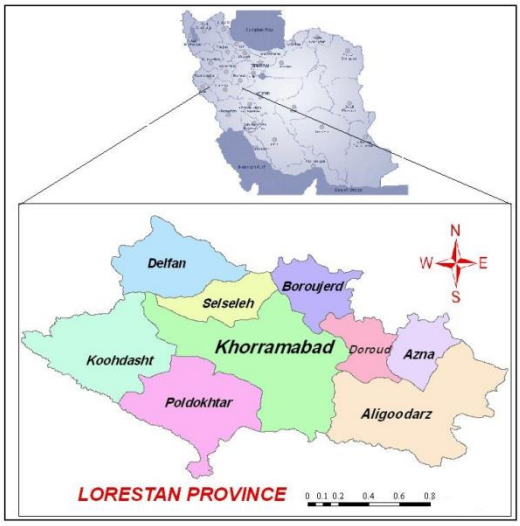

Figure1. location of study area

The province consists of 28,294 square kilometers and its population in 2011 amounted to 1,754,243 persons. This province has the thirteenth rank of population in Iran as one of the most populous provinces of Iran.

Khorramabad and Boroujerd are the two important cities of lorestan. There are 10 cities, 23 towns, 27 districts and 84 villages.

This study sought to examine the role of livestock industry in the province in 2011. Variables in this study were 14 factors.

Numerical Taxonomy steps:

Steps that are carried out in taxonomic methods are as follows:

1 - The initial matrix table: First, the original data matrix table based on the index used is set up, so that the names of places or regions in one column and the values of the parameters are used in the corresponding columns .Rating is done according to the chosen variables (zarand et al , 2007).

2 - Table of standard matrix: the data matrix is prepared according to the different criteria which may have different scales .It is necessary to eliminate the scales of indicators and indices incongruity is removed .Standardization can be used to transform the original indicators into indices with zero mean and standard deviation of all the criteria to be one. With this formula, the main indicators of the index will become standardized .In this formula:

$$Z = \frac{X_{ij} - \bar{X}_{\iota}}{S_i}$$

After standardization of indicators based on the formula used above, standard tables are obtained (Kalantari , 2008).

3 – Calculation of composite distances between locations:

At this point, the difference or distance between each region to other regions is compared in each of the indexes calculated.

4 – Calculation of the composite distance between each region and other regions based on the summation of the index used.

5 – Identification of homogeneous regions: to achieve a homogeneous region the upper limit (D+) and lower limit (D-) must be attained for the shortest distance achieved.

To perform this step, the following equation is used: $\pm D = 2s_d \pm \bar{d}$ (Upper or lower limit)

$\bar{d}$= Average of the shortest distanceis obtained through the following equation: $\bar{d} = \frac{\sum_{i-1}^{n} di}{N}$

s_d= Standard deviation is obtained from the equation: $s_d = \sqrt{\frac{\sum_{i-1}^{n}(di-\bar{d})^2}{N}}$

Regions located within lower and upper limits are among homogeneous regions while the lower and upper limit regions are classified in other homogeneous groups.

6 – Calculation of the combined distance of each region from the ideal region that is obtained by the formula: $C_{io} = \sqrt{\sum(Z_i - Z_o)^2}$

7 - Calculation of development level of areas: At this stage, the relative level of development of each region can be calculated by the following formula: $DL = \frac{C_{io}}{C_o}$

In this equation: DL= Level of development in each area, C_{io}=combined distance from the ideal region for each region. C_o= Mean of C_{io} plus twice the standard deviation of the column is obtained from the following equation: $C_o = \overline{C_{\iota o}} + 2S_{io}$

$\overline{C_{\iota o}}$ = is the average of Column calculated by the following formula:

$$\overline{C_{\iota o}} = \frac{\sum C_{io}}{N}$$

Also S_{io} Is the standard deviation of the columnC_{io}which is calculated from the following formula:

$$S_{io} = \sqrt{\frac{\sum(C_{io} - \overline{C_{\iota o}})^2}{N}}$$

The value DL is always between zero and one .The closer to zero indication of development is , the region is more undeveloped and the closer to one the indication of development the more developed it is.

CONCULSION

In order to determine the homogeneity of the townships, the standard matrix was used to establish Euclidean or distance matrix which indicates theproximities of each two townships. In this matrix, the minimum distance of each city from other cities (other than zero) was determined and inserted in the matrix.

Table 1. Determine the Homogeneity of the Townships

Doroud	Azna	Boroujerd	Poldokhtar	Selseleh	Aligoodarz	Delfan	Koohdasht	Khooramabad	Township
2.19115	2.19917	2.96725	3.82788	2.59647	3.33823	2.92528	4.95751	5.17190	DIST

Therefore, it is possible to obtain homogenous range: 5 . 51955 > d > 1.78126. As seen in the Table 1, none of the cities are out of range. Due to this fact, all cities are equal, based on research data and have the ability to enter into analysis of the degree of development.

Based on the results of the combined distance matrix, none of regions were known to be heterogeneous.

Table 2. Degree of Development

Level of development	Townships	C_{io}	DL
1	Khorramabad	4.36841	0.42064
2	Koohdasht	4.50615	0.43390
3	Delfan	7.40321	0.71286
4	Aligoodarz	7.52544	0.72463
5	Selseleh	7.55586	0.72756
6	Poldokhtar	7.92488	0.79163
7	Boroujerd	8.22121	0.83218
8	Azna	8.64236	0.86384
9	Doroud	8.97112	0.87454

The results of the analysis of data show that townships of Khorramabad and Koohdasht with the degree of development 0. 420640 and 0. 433900 ranked first and second, respectively. Townships Azna and Doroud with the degree of development 0.86384 and 0.87454 are developed.

Table 3. Classification of Study Area in order to level of Development

Township	Development	DL	Row
-	Developed	0< DL≤0. 25	1
Khorramabad Koohdash,	Moderately Developed	0.26<DL≤0.50	2
Delfan, Aligoodarz, Selseleh,	Less Developed	0.51<DL≤0.75	3
Poldokhtar, Boroujerd, Azna, Doroud	Undeveloped	0.76< DL≤1.0	4

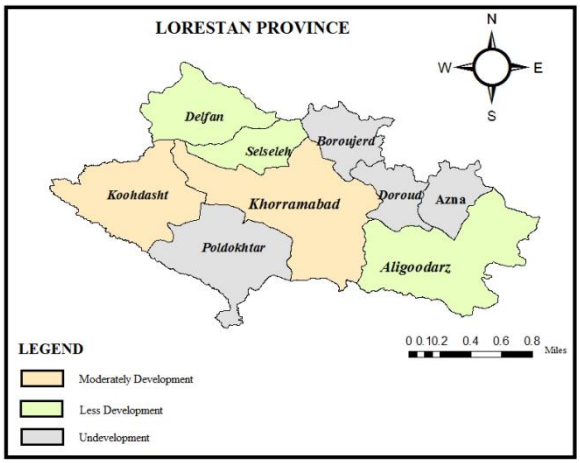

Figure 2. Map of classification of study area

Underdevelopment border in the classification is 7.235. Given that the province under study has great usability and is very talented in the field of agriculture and livestock industry with good climate, good soil, abundant manpower, "good water resources, plant species diversity, good pastures and other factors, this province can be developed more and more especially in the field of agriculture and animal breeding in order to function better. Through careful planning and applying potentialities in the province, there emerge the grounds of development in local and regional fields.

So it seems that development of livestock sector and rural development could ultimately accelerate the development of regional and national levels. To achieve this, we proposed the following:

1 - Financial support to farmers aiming at greater access to educational skills.

2 - Marketing support to ensure internal and external markets for livestock products for export.
3 - In the medium and long term planning, priority should be given to disadvantaged districts.

REFERENCES

Amininezhad GR. 2008. Analysis of the degree of development in districts facilities in South Pars area. Rural and development journal, 3:143-172.

Badri SA, Akbarian SR. 2006. Determining of rural development level in Kamiran Township. Journal of Geographical Research, 8.

Dehghan A. 1994. Determining of degree of development level in Province of east Azabaijan. Master thesis, Shaid Behashti University, Tehran, Iran.

Molaei M. 2008. Survey and Compare of level of Development in agriculture section in provinces of Iran at during 1994-2004. Journal of Egtesad Keshavarzi & Tosea,16(63):88-71.

Saraki N. 1994. Determining of degree of development level in Kermanshah Province. Master thesis, Shaid Behashti University, Tehran, Iran.

Sepehr Doost H. 2008. Survey of government Performance in social and economic development. Journal of Rural and Development. 2: 69-85.

Todaro M. 1987. Internal migration in developing countries. Translated by Sarmadi, Mostafa and Reisifard, Parivash. Institute of Labour and Social Security publication.

World Bank . 2006. Org/wbi/source book/sba2/htm.

Zand F, Mirzaeirashnoo Z, Sepahvand Z. 2013. Analyzing the distribution of health and therapy services in Lorestan province. International Research Journal of Applied and Basic Sciences. 4 (10): 3444-3449

Zand F. 2006. Organizing space and rural settlements with an emphasis on applied geography. Master thesis, I.A University, Shahre rey Barnch, Tehran, Iran.

Zarand M, Hesari M, Sani HR. 2007. Ranking of the Khorasan Province Townships In terms of Development. Excerpts of statistical Contents,2:43-55.