

Assessment of Sustainable Urban Development: The City of Sardasht in Iran

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Abstract: *The aim of sustainable development geography and urban planning studies is to achieve a sustainable status in urban areas and to increase life quality of citizens. In another words, the aim is to create or enhance sustainable features and factors of culture, society, environment and economy. This research aims to study sustainable development of urban areas of the city of Sardasht. In this study to have a good command and methods such as historical, descriptive, analytical and case study were used. For data analysis; Factor analysis, Coefficient of Variation and were utilized. Software's like SPSS were used. And urban Sardasht, were assessed different aspects of stability and instability the index of social, economic, land use, etc.*

Keywords: sustainability, sustainable development, urban sustainability, instability, Sardasht

1. Introduction

Feature of our time is urbanization of the population increasing population of cities and consequently the development of cities and towns. In 1900 has lived, one in eight people only one person in urban areas (Gilbert and Gagler, 1998: 7) and in 2025 will be living one in three people, two people in cities (Bahrain, 1999: 31). So that more than 90 percent, urban areas will be in developing countries. (Pag, 2005: 19)

Increasing population, increasing urbanization, limited natural resources, industries dependent on the nature of the lack of effective control policies (Bahrain, 2004: 12) the lack of awareness of environmental policies, and poverty in general, the dominant majority of Third World countries has created more serious problems for cities, in these countries (Bahrain, 2000: 281). Due to, urban deterioration, about 600 million people live, of population of this country, dangerous and threatening conditions and more than a billion people are without adequate shelter (UNCHS, 2000:10) and at least 250 million people, of inhabitants of the cities, do not have access to water piping (Bahrain, 2002: 52) and about 400 million people are lacking health facilities high density, lack of water plumbing, areas excluded, impoverished areas of are such. (Whitehead, 2003:64)

So, urban development is a phenomenon the world, most growth and urban development will be observed in developing countries.

Sustainable urban development (sustainability) and the Sustainable City, is a reasonable and reasonable alternative to destructive twentieth-century urbanism. In Iran ratio, urbanization, more than twice, has been, during the years 1957 to 2007 and is over from 31/4 percent in 1957 to 68 percent in 2007 (Houshyar, 2010: 55).

2. Statement of Problem

The population, Sardasht urban has been 14/2 times, the sixth round of last census (1957-2007), (Statistical Center

of Iran, 2008). While is not development, in terms of services, equipment and facilities, and occupying urban space, commensurate with increase in population and such an increase, has created instability in many aspects, architectural, physical, ecological. At present, migrations, rural - urban, has created a lot of problems for Sardasht, that has led to increased unemployment, unbalanced urban growth, marginalization, ugliness of landscape, urban rural and nomadic life, regardless of rise in urban infrastructure and urban environment and indiscriminate use of resources. City, the physical aspect have the exhaustion and the ruins of buildings old and intermediate tissue also this part of the city have disturbed land uses and has challenged the sustainability debate(Hassani, 2012:14). The purpose of this study was to evaluate sustainable development, urban development, with a view of the components and indicators of urban geography, social and urban Sardasht.

3. Materials and Methods

The importance of using scientific methods is undeniable in any research (Houshyar, 2008:45). This paper has been used studies the documents - Libraries and field methods.

In this study, we used a nonparametric test of the method, the sign of difference indicators. In this method, it is assumed that the difference is in each pair of zero or one size. In other words or there is no difference between City of Sardasht and urban areas of the country, or a number of superior indicators or less in Sardasht is the same size the whole country. In this method, the test has been the null hypothesis of no difference between national indicators, the indicators of the level of Sardasht. In contrast, there is supposed to be better than the national index compared to index of Sardasht which is of the instability development. This test is applicable for the scale of the instability.

4. Sign Test and Paired Comparisons

When there is a wide heterogeneity in the experimental units, the tests can be done according to internal homogeneity couples. One of, non-parametric tests in this

context is sign test. This test, based on is difference between the two treatments, in any pair homogenous D_i . The test statistic is the number of couples in which one treatment has a response higher of the other treatments is (S). If two treatments are the same as a size differencing has the sign of positive and negative. Thus, under the null hypothesis binomial distribution is $b(n, 0.5)$. Conversely assumption R is greater than or opposite is $(p) + [0.5]$. Thus for the large quantities S, is rejected assumption zero. Test statistic compare with reference to table of binominal. In case, the large sample test of signal can be performed using the distribution Binomial, close to normal, with mean, $n / 2$ and SD, radical $n / 4$, (Batarchaya and Johnson 1993, pp. 597 -600).

5. Discussion

The Social Indicators

To run the test using the data in Table 1 which the choice of selected indicators of social indicators is, with $n = 7$, $s = 2$ and $p = 0.5$, the null hypothesis of the equality measures against the difference between the indices of Sardasht and indicators does not exclude the urban areas of the country, because it is, $p [S \geq 5] = 0.058$

Table 1: Comparison selected social indicators of Sardasht and urban areas

Index	City Of Sardasht	Urban Areas Of Iran	D_i
The population growth rate in the period 1997-2007	2.0	1/61	-
Percent of literate populations	76/2	88/9	-
Percent of literate females	65/5	85/6	-
Percent of population years old 0-14	30/88	23/7	+
Percent of populations 65 years and more	4/02	4/77	+
Average household size	4/57	3/89	-
Percent of households, 5 people, and more	36/8	32/21	-
Number of pairs who the indices City of Sardasht better or positive = r			2

6. The Economic Indicators

To run the this test using data selected in economic indicators, is, with $n = 5$, $s = 1$ and $p = 0.5$, the null hypothesis does not rule out equality of indicators, in front of difference between the index the city Sardasht and Indicators the country's urban areas because it is, $p [S \geq 5] = 0.068$.

Table 2: Comparison selected Economic indicators of Sardasht and urban areas

Index	City Of Sardasht	Urban Areas Of Iran	D_i
Percent active population, in terms of economic	29/6	38/77	-
Percent inactive population, in terms of economic	65/6	60/4	-
Unemployment rate	9/7	11/82	+
Percent of households land owner and buildings	59/8	62/2	-

Percent of households, tenant	13/4	9/2	-
Number of pairs who the indices City of Sardasht better or positive = r			1

7. The Land Uses Indicators

Run the test using the Indicators selected by the land uses Indicators with the $n = 11$ $s = 4$ and $p = 0.5$ the null hypothesis does not rejected equality of indexes the difference between indicators City of Sardasht and Indicators the country's urban areas because it is $p [S \geq 5] = 0.051$

Table 3: Comparison of indicators selected land uses City of Sardasht, and urban areas of Iran

Index	City Of Sardasht	Urban Areas Of Iran	D_i
Residential Capita	24/3	25/19	-
Commercial capita	1/86	0/98	+
Educational Capita	1/00	1/02	-
higher education Capita	0/02	1/3	-
Religious Capita	0/5	0/17	+
Cultural Capita	0/51	0/05	+
Tourism and Hospitality Capita	0/06	0/12	-
treatment - Health Capita	0/30	0/88	-
Sporting Capita	1/13	0/12	+
Green space Capita	1/05	3/88	-
transportation Capita	16	21/4	-
Number of pairs who the indices City of Sardasht better or positive = r			4

8. Comparison of the final selection of Indicators

Run the test using the selected indicators, the social, economic and physical, with $n = 16$, $s = 5$ and $p = 0.5$, does not reject the null hypothesis, the difference between the Equality of indices Indicators and Indicators for urban Sardasht City of the country because is $p [S \geq 5] = 0.055$

Table 4: Comparison of the final selection of Indicators, City of Sardasht and urban areas of Iran

Index	City Of Sardasht	Urban Areas Of Iran	D_i
The population growth rate in the period 1997-2007	2.00	2.74	-
Proportion of male population to female population	104.6	103	+
Percent of literate population	76.2	85.7	-
Percent of literate females	65.5	81.7	-
Difference between the Percent of literate males and females of literate	9.29	7.9	-
Percent of active population, in terms of economic	29.6	33.87	-
Percent of women in terms of economic	6.0	6.9	-
Percent of population unemployed	3.4	8.86	+
Percent of employment, population 10-14 years old	2.4	0.8	-
Mean number people per of households	1.38	1.1	-
Mean number of households in residential units	7.5	4.5	+

Percent of households with safe drinking water	99.01	96.26	+
Percent of households with electricity	93.2	99.1	-
Percent of households with Phone	39.9	45.5	-
Percent of households with Urban gas	73.6	48.17	+
Number of pairs who the indices City of Sardasht better or positive = r			5

Thus the assumption of zero Equality of indices is refuted in contrast the difference between the Indices City of Sardasht and Indicators urban areas of the country. As a result with these indices the four dimensions of economic, social, physical and environmental and general indexes is confirmed with the 95% confidence we can say that the Situation City of Sardasht is different with the Indicators urban area Iran and in principle inequality Sardasht urban development is as compared to urban areas of the country.

9. Conclusion

In this study, City of Sardasht as one of the border cities of West Azarbaijan province, in recent decades has seen, reviewed and analyzed. The development and changes, both in terms of environmental, social, economic and physical. Expansion, City of Sardasht, is more due to the migration of rural - urban.

It has been developed appetite migration City of Sardasht and the natural growth of its population coupled with the historical development of City of which has been achieved on the outside from framework of the projects carried out. In this process, many expansion which have been done out of, framework of plans, produced, have created unstable areas, the direction suburbia immigrants false job creation the economic situation of migrants the loss agricultural land around the City and the discontinuous residential development.

City of Sardasht not benefit from favorable conditions in terms of having the facilities and utilities. And the level of urban per capita, has a minimum threshold, so that shows how having City of facilities and utilities and municipal levels of total activity. Based on studies that were conducted on the levels and types of activities and facilities to be found City of far more land per capita and standard values and activities. Lack of government investment in industry sector and a lack of expertise and skills of the workforce, boundary of the City of, dependent on many rural areas to city, center city services are the reasons for the dominant role of city services and have been looking for low social development and the economics of the city and its hinterland.

Political developments in Iraq strongly influenced the pattern City of trade which had in previous years the boom a bit. As in recent years, the official frontier markets, have been working to the highest degree. Expansion of trade and commerce has had a tremendous impact on the economy of rural and urban areas. Services sector and wholesale and retail trade show 70 Percent of and 42 Percent of respectively, the groups major and groups' main job the dominant sector in City of Sardasht.

References

- [1] Bahrain, S.H (1999), "Sustainable urban development, from idea to action," Journal of Environmental Studies, Year 27, No. 27 (summer).
- [2] Bahrain, S.H (2000) meta-modernism and post-modernism, in Urban Studies, Tehran: Tehran University Press, first edition.
- [3] Bahrain, S.H (2002), "City Planning and the Environment," Journal of Environmental Studies, Year 23, No. 19 (winter).
- [4] Bahrain, S.H (2004), "models to evaluate the quality of the urban environment", Journal of Environmental Studies, Year 24, No. 21 and 22 (summer and winter).
- [5] Gilbert, Alan and Joseph Galgr (1998) Cities, Poverty and Development, Urbanization in the World, Tehran, Tehran Municipality's Department of Public & International Relations, First Edition.
- [6] Hassni, Ali, (2012). Analysis of the spatial development of Sardasht. Master's thesis. Payame Noor University, Rasht.
- [7] Houshyar, Hassan, (2010). Urban hierarchy of West Azerbaijan province. Journal of Geography and Planning. University of Tabriz. No. 38.
- [8] Houshyar, Hassan, (2008). Role of intermediate cities in regional development. Ph.D. Dissertation, University of Tabriz. .
- [9] Pag, Cedric (2005) Sustainable Cities in Developing Countries, Tehran: Center for Research & Studies, Planning and Architecture, Iran, printed first.
- [10] Statistical Center of Iran , (2008) . The results, detailed, General Census, Population and Housing.
- [11] United Nations Center for Human Settlement (UNCHS) (2000) Global Report on Human Settlement, Oxford University Press, Oxford
- [12] Whitehead, M. (2003). (Re)Analyzing the sustainable city: Nature, urbanization and the regulation of socio-environmental relations in the UK. Urban Studies., 40 (7).