Impediments to development in the border provinces of Iran

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Abstract

In this study, the conditions of 11 border provinces of Iran including Ardabil, West and East Azarbaijan, Kordestan, Kermanshah, Ilam, Khouzestan, Hormozgan, Sistan & Blouchestan, and Khorassan with respect to certain indicators such as life expectancy, literacy level and birth rate have been explored, using statistical U-, T- and Z-tests as well as correlation coefficients.

The findings indicate that there are significant differences between internal provinces and border provinces, especially Sistan & Blouchestan, Kordestan, Ilam, Kermanshah, West Azarbaijan and Hormozgan with respect to the above-mentioned indicators, differences which have resulted in a negative migration balance. On the other hand, the economic dependence of these provinces on adjacent countries can result in their political-cultural disintegration and consequently in a decline in national identity, power and security.
Keywords: public economic development, migration, life expectancy, standards of living, literacy, border provinces.

1 Introduction

In early 1990s, fourteen republics of the former Soviet Union gained independence. The early reports of the UN's Human Development in this decade published in 1992, identified these republics, especially those with a Muslim population, as countries of low development. Great distance from the capital Moscow and cultural-religious and even ethnic diversity may explain the backwardness of these republics. There is also this possibility that Moscow predicted the separation of these republics. This was not the case in Iran. The current territory of Iran has been for centuries as part of a greater historical land; it has been the home of Islam for over 14 centuries. Therefore, cultural,



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especially linguistic, differences, or distance from the capital, could not have played a great role in the development level in various regions.

Russia and Iran, however, have something in common: they have the greatest number of neighbors in the world (Russia with 16 neighbors and Iran with 15 neighbors). They also have the greatest number of manifest and hidden differences with their neighbors [4]. The situation of Iran is more sensitive for the following reasons: the rapid growth of population specially in the border provinces, the transparency of its political stances on the regional and world issues; inability to satisfy the demands of its population in the matters of housing, employment, etc.

In this article, the purpose is to analyze certain fundamental variables affecting human development in border provinces by comparing percentages and using Z score, correlation coefficient, and other tests. The objective is to provide an answer to the question whether distance from the capital has an effect on the level of development. This is made possible by comparing these provinces with other provinces in the country.

2 Birth rate

In 1991 and 1996, birth rate in Iran was estimated to be 28.3 in a thousand [10] and 19.8 in a thousand [8]. Except for Khorassan and East Azarbaijan, birth rate was higher in all peripheral provinces than other provinces in the country. In this five-year period, Booshehr and Ilam showed a positive development since the Z score of birth rate in the two provinces was +0.7 and +1.1 in 1991 and -0.3 and 0 in 1996 respectively.

In four provinces facing a crisis of birth rate, that is, West Azarbaijan, Sistan & Balouchestan, Hormozgan and Kermanshah, the percentage of literacy was the lowest; so was the percentage of urban population, except for Kermanshah province. In these provinces, the average annual growth of population was much higher than that in other provinces of the country in 1986 to 1996.

Based on the T-test, it was confirmed, with 95% accuracy, that there was a significant difference between the peripheral provinces and other provinces in terms of birth rate in 1991, but no such significant difference existed in 1996 (Table 2). Although this is a positive indication, but the effects of high birth rate in non-peripheral provinces such as Chaharmahal Bakhtiyari, Kohkilooyeh-Booyer Ahmad and Lorestan should not be overlooked.

3 Death rate

Since there is no unified mechanism in the country for recording incidences of death, and since the population is distributed over a wide area, death rate statistics are not of much reliability. It is, however, possible to identify the provinces in which death rate is high. Based on available statistics, the provinces with a death rate higher than the average death rate in the country are Ilam, Kermanshah, Kordestan, East and West Azarbaijan. Death rate in Kordestan is almost twice as much as the average death rate in the country.



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4 Migration volume

Migration volume may be analyzed in two ways: first, in terms of either the percentage of the population migrated or the percentage of the population residing in a place other than their birth place compared to the total population. Second, in terms of migration balance. According to the first approach, in the whole provinces of the country, the greatest volume of migrants are related to these very provinces, with Tehran having the greatest volume of migrants (Z=+2.9), followed by Kordestan (Z=+1.4), Khoozestan (Z=+1.4), and Ilam, Booshehr, Kermanshah and Khorassan, obtaining the ranks 2 to 9 respectively. According to the second approach, which is more efficient in the analysis of the migration situation, of the eleven provinces under study (except for Khoozestan, which has been receiving migrants because of the return of the people to their homeland with the termination of the war), the provinces of Hormozgan, Sistan & Balouchestan, Ilam, Khorassan and West Azarbaijan have had a relative stability and the other six provinces have exported immigrants. The provinces with the greatest volume of migrants were Booshehr, Ardabil, Kermanshah and East Azarbaijan with a negative balance of 4.3, 3.3, 2.6 and 2.6 percent respectively.

5 Literacy

Except for Khorassan, in all the provinces under study the literacy indicator was lower than that in the other provinces of the country. This is especially true about Sistan & Balouchestan (with the literacy rate of 48.1% and Z=-2.9) and Kordestan (with the literacy rate of 56.9% and Z=-1.7). These two provinces had the lowest ranks among the eleven border provinces with respect to level of development, gross costs per capita and life expectancy (Table 1). Both T and U significance tests show a 99% difference between the border and other provinces. Therefore, priority must be given to the border provinces for promotion of literacy.

6 Urban and rural population

Based on the 1996 census, in all the border provinces under study except for Khoozestan, the level of urbanism is lower than that in other provinces, with Hormozgan having the lowest level (41.8%, Z=-1.1). Therefore, these provinces are expected to have a higher fertility and population growth. What is important is that in the regional plans, considering the structure of the population and economic and security considerations, more emphasis should be placed on agriculture and the resolution of problems in the rural areas. This is especially necessary because the average employment in the industry section in all these provinces (except for Khorassan, where the industry of weaving carpets is very active), is lower than that in other provinces of the country.

According to T and U tests, there is no significant difference between the two groups of provinces with respect to the rate of urbanism. The reason is that there



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are provinces with a very low percentage of urbanism among non-peripheral provinces. The standard deviation in these provinces, being 15.3, confirms this. Based on Fisher test, a significant difference between the variances of the two provinces has been proved (Fa=1.46. F0=0.16).

7 Population growth rate

Considering the status of literacy, birth rate and urbanism in these provinces, they are predicted to have a high population growth rate. This is confirmed by a study of annual population rate from 1986-96. For example, the provinces Sistan & Balouchestan, Hormozgan, Khoozestan, Ilam, Kordetsan and West Azarbaijan showed a population growth rate higher than that in other provinces of the country as well as in the provinces of Khorassan, Booshehr and Kermanshah. The figures related to East Azarbaijan (0.8) and Ardabil (1.2) are not valid because of the new administrative divisions and the high rate of migrants' export. Therefore, the provinces that have priority in terms of population growth decrease are those provinces that have a very high birth rate. It should be borne in mind that some non-peripheral provinces that have a high birth rate and a high population growth. For this reason, based on the T-test, there is a significant difference between population growth rates in the two groups of provinces only with an 80 percent accuracy.

8 Gross costs per capita

Based on the 1996 census, the average gross costs per capita in the country was 1899000 Rials. All the border provinces have a lower gross costs per capita. This is especially true about Sistan & Balouchestan, Kordestan and Ilam with 1120000 Rials (Z=-2), 1386000 Rials (Z=-0.85) and 1409000 Rials (Z=-0.76) respectively. Ironically, these three provinces that have a poor status with respect to birth rate, population growth rate and literacy level, also have the first ranks in the country with respect to the dependence ratio along with the provinces of Kermanshah, Hormozgan and Khoozestan. Thus the greatest number of economic problems and pressures exist in the eleven border provinces in general and the 6 above-mentioned provinces in particular.

9 Life expectancy

It was estimated in 1996 that life expectancy in Iran was 69.2 years. Unfortunately, in all the border provinces, life expectancy is lower than that. In Khozestan, for example, where the highest life expectancy is observed, it is 66.9 (Z=-0.97) and in Sistan & Balouchestan, where the lowest life expectancy is observed, it is 61 (Z=-3.4). T and U tests shows a significant difference in life expectancy between the two groups of provinces with a precision of over 99.5%. Since life expectancy is the result of so many other factors, it is of great importance and should be given due consideration.



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10 General economic development level

With respect to this variable, the border provinces should be given priority since the provinces Sistan & Balouchestan, Ilam and Kordestan had the lowest indicators and rank. (The indicators were -0.7, -0.68 and -0.57 respectively and the ranks were 24, 23 and 22 respectively in comparison with the 24 provinces of the country). The indicator and rank of the next four provinces are as follows: Kermanshah (-0.32, 17); Hormozgan (-0.13, 16); Booshehr (-0.07, 14), West Azarbaijan (0.15, 11). The significance test has been affected by certain less developed provinces among non-peripheral provinces and the difference has been proved by the T-test with an accuracy level of 85%.

11 Regression analysis of the relationship of variables

Because of the importance of the relationship between the variables, the significance of correlation coefficients in all the provinces of the country was tested. The results are as follows: There are, on the one hand, significant (over 95%) relationships between the variables of literacy and urbanism (r= 0.84); between net percent of migrants and the indicator of development (r=0.52); between population growth and migration balance (r= 0.74), between percentage of urbanism and net percent of migrants with the indicator of development (r=0.81 and r=0.52 respectively). And on the other hand, there are inverse significant relationship between urban population growth and the percentage of literacy (r=-0.7), the percentage of urbanism (r=-0.68), general development (r=-0.61) and between migration balance and percentage of agricultural employment (r=-0.43). This indicates the fact that the main problem in the country is the profound differences between cities and villages and among various provinces. Thus migration from villages to cities in less developed provinces with a low urban population, involves a quantitative change; that is, an increase in the number of the city population, whereas the general development and literacy levels remain low. In fact, in these provinces, the villagers who can no longer stand life in villages rush to cities which have not provided their population with a minimum of standards of living, cities which, however, seem attractive to the newcomers from the province. The important point here is that the economic power of the rural areas in these provinces must be strengthened because one of the major differences between the city and the village is that employment in the city has a higher annual growth, a factor which explains the rush of immigrants to cities [3].

12 Conclusions

To establish justice and because of its geopolitical situation, specially because it is located among such countries as Turkey, Azarbaijan, Iraq, Turkmanistan, Pakistan, Afghanistan and Persian Gulf countries, Iran should treat all its provinces fairly, so that the whole country may function efficiently. If each province functions inefficiently, it affects the country as a whole.



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Table 1: Population and economy variables in the border provinces under study.

Province	Pop. In 1000s	Pop. In 1000s	Growth rate %	Area %	Pop. %	Birth rate (in 1000s)	Urban-ization %	Life expectancy	Literacy Rate	GCPC	Mig. Balance	Develop. index
	1996	**1986**	**86-96**	**1996**	**1996**	**1996**	**1996**	**1996**	**1996**	**1996**	**86-96**	**1986**
Ard.	1168	1036	1.2	1.13	1.94	19.8	48.7	65.7	63.2	1652	-3.3	--
E.Azar.	3326	3077	0.8	2.7	5.5	17.1	60.3	66.5	67.5	1652	-2.6	0.33
W.Azar.	2496	1971	2.4	2.3	4.2	30.2	52.7	64.7	61.1	1439	+0.6	0.15
Kord.	1346	1078	2.25	1.7	2.2	21.8	52.4	61.6	56.9	1386.	-1.9	-0.57
Kerm.	1779	1462	1.98	1.45	2.96	23	61.7	65	68.1	1860	-2.6	-0.32
Ilam	488	382	2.5	1.17	0.8	19.8	53	64	67	1409	-0.6	-0.68
Kooz.	3747	2682	3.4	4	6.2	22.2	62.5	66.9	69.2	1781	+3..3	0.42
Boosh.	744	612	1.97	1.55	1.24	18.7	53	66.6	72.5	1493	-3.4	-0.07
Horm.	1062	762	3.38	4	1.8	27.8	41.8	65.9	63.3	1585	-0.3	-0.13
Sist.	1723	1197	3.7	11	2.9	30.8	46.2	61.1	48.1	1120	-0.1	-0.7
Khor.	6448	5280	2	19.4	10.7	18.8	56.6	64.3	73.9	1502	+0.2	0.35
Total	24327	19539	2.22	50.4	40.5	22	55.8	64.5	64.5	1534	--	Neg.
Country	60055	49445	1.96	100	100	19.8	61.3	69.2	72.9	1899	--	

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Table 2: Results of significance T- and U-tests (1996).

	Border provinces		Other Provinces								
Variable	Mean	Standard Deviation	Mean	Standard Deviation	T-test	U-Test	T-Acceptance	U-acceptance	T-Acceptance*	U-Acceptance*	F-test
Pop. growth	2.2	0.86	1.8	0.57	1.4	45	80%	-	95%	95%	+
Birth rate	22	4.5	19	3.6	1.9	41	92%	-	98%	99%	+
Urbanization %	53.5	6.2	58.9	15.3	1.1	80	70%	-	95%	90%	-
GCPC	1534	195	1613	253	1.01	65	70%	-	97%	95%	-
Literacy rate	64.5	7.03	72.7	5.7	3.28	33	99.6%	99%	99.9%	99%	+
Life expectancy	64.5	1.84	67.2	2	3.44	34	99.7%	95%	99.9%	99%	-
General Development	-0.12	0.41	0.16	0.65	1.58	56	58%	-	98%	80%	-

*Excluding the three background unborder provinces of Lorestan, Kohkilooyeh & Booyer Ahmad, Chahar Mahal.

A study of the most important variables affecting development in eleven border countries in Iran showed that such provinces should be given priority because based on T and U tests, there is a significant difference between border provinces and other provinces (with the exclusion of three provinces of Chaharmahal Bakhtiyari, Kohkilooyeh-Booyer Ahmad and Lorestan), with respect to the said variables. The provinces of Sistan & Balouchestan, Kordestan, Ilam, Kermanshah, West Azarbaijan, Hormozgan and Booshehr are not in a good position with respect to the variables birth rate, population growth, literacy, gross costs per capita, and life expectancy, and the provinces Ardabil, East Azarbaijan, Kermanshah and Booshehr are not in a good position with respect to migration statistics. Finally, since development is for the people, and is materialized by the people, it is good to remind authorities responsible for development of what Zurick [12] has stated about development: "Go to the people; answers are there."

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