

خلیل کلانتری

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شناسایی مناطق عقب‌مانده در ایران^۱

Khalil Kalantari

Ph. D in Regional Planning

Identification of Backward Regions in IRAN

Iran, with a legacy of centralised planning system, is characterised by a high degree of regional disparity. A number of studies, conducted at the level of provinces, have confirmed this fact. The efforts of this nature at the county level are hard to find. The present paper intends to fill this gap, especially by way of identification of backward ones amongst them. In all, 32 counties were found as very backward and 53 as relatively backward out of 195 in all. Economic and social aspects of backwardness are interlinked but the degree of inequality in respect of economic development is much higher than that in social development. The overall spatial pattern conforms to the core-periphery model.

خلاصه

یکی از مشخصه‌های بارز در توسعه فضایی در ایران وجود نابرابریهای منطقه‌ای است. براساس مطالعات انجام شده این شکاف در مواردی حتی از ده برابر نیز تجاوز می‌کند. مقاله اخیر در صدد است تا با شناسایی شهرستانهای عقب‌مانده در ایران به تبیین الگوی فضایی و ارائه راهکارهای لازم در این زمینه بپردازد. در این مطالعه با استفاده از ۱۷ شاخص توسعه اجتماعی - اقتصادی و با بکارگیری روش محاسبه

۱- با توجه به این که مقاله فوق در سال ۱۳۷۴ نوشته شده، لذا از آمار سرشماری سال ۱۳۶۵ استفاده شده است. با

بکارگیری آمارهای جدیدتر اگر چه ممکن است رتبه برخی از شهرستانها اندکی تغییر کند، اما قطعاً الگوی توسعه فضایی به قوت خود باقی خواهد ماند.

ضریب محرومیت از مجموع ۱۹۵ شهرستان تحت مطالعه، ۳۲ شهرستان بعنوان شهرستانهای خیلی عقب مانده و ۵۳ شهرستان بعنوان شهرستانهای نسبتاً عقب مانده مورد شناسایی قرار گرفتند. به منظور مقایسه شکاف توسعه در ابعاد اجتماعی و اقتصادی و تعیین میزان همبستگی بین توسعه اقتصادی و توسعه اجتماعی شهرستانها، روشهای آماری ضریب اختلاف و ضریب همبستگی مورد استفاده قرار گرفتند. یافته های این مطالعه نشان می دهد که میزان نابرابریها در ابعاد اقتصادی به مراتب بالاتر از ابعاد اجتماعی بوده و ضریب همبستگی ۰/۶۸ نیز بیانگر ارتباط معنی دار بین عقب ماندگی اقتصادی و عقب ماندگی اجتماعی است. الگوی فضایی بدست آمده در این مطالعه حاکی از وجود الگوی مرکز و پیرامون (Core-Periphery) در توسعه منطقه ای در ایران است. بطوری که کلیه شهرستانهای عقب مانده در نواحی حاشیه ای و مرزی و در مناطق سخت کوهستانی واقع شده اند. الگوی فوق نشان دهنده وجود انزوای اقتصادی و فقدان پیوند بین اقتصاد این مناطق با اقتصاد ملی است. براساس یافته های فوق، برای توسعه این مناطق از یک طرف اتخاذ سیاست تمرکز زدایی در نظام برنامه ریزی و تصمیم گیری و از طرف دیگر، تهیه و اجرای طرحهای ویژه توسعه مناطق کوهستانی و مناطق مرزی ضروری به نظر می رسد.

Introduction

In most developing countries, planning has invariably been restricted to the national level. The plans formulated in these countries were in terms of a set of directives and goals for the economy as a whole. The problems of regional development in the national context did not get adequate attention of the policy makers and as a result the development programmes of these countries resulted in lop-sided and distorted development with growing regional disparities (Rao, H, 1982). In these circumstances, some of the already developed regions enjoy the privilege of developing at the cost of the backward regions which continued to stagnate.

In Iran, the problem of regional backwardness has not got sufficient attention of scholars and planners. Most of the studies in the regional context are devoted to the measurement of development levels at provincial scale, neglecting the identification of backward regions. The backwardness of some regions in Iran is such a crucial phenomenon that in the Budget Law of 1990, the Islamic Consultative Assembly announced that the government should identify the backward Dehestans to allocate special budget and prepare necessary plans for these regions. In the same year the Plan

and Budget Organization identified 269 Dehestans located in 112 counties as backward Dehestans (I.R. of Iran Justice, 1990). As the lowest level of planning and implementation organisations in Iran are located at "county level", it is more logical that the adoption of strategies and policy making for backward areas should be carried out at this level. Therefore, it is a pre-requisite to identify the backward areas at county level. This will help the planners and policy makers to formulate appropriate strategies and plans for backward areas. In the light of above, the present paper preproposes to:

- i) identify the most backward and relatively backward counties, by constructing the backwardness composite indices for economic structure, social and physical infrastructure and overall backwardness;
- ii) find out the spatial inequality of economic and social dimensions;
- iii) spell out the relationship between economic backwardness and social backwardness; and
- iv) suggest and appropriate strategy for development of backward areas.

Methodology and Data Base

In present paper, the identification of backward counties is based on 17 indicators, grouped into two dimensions of economic structure (10) and social and physical infrastructure (7). The indicators are as follows:

A) Indicators of Economic Structure

- 1) Female participation rate in economic activities
- 2) Percentage of workers engaged in secondary sector
- 3) Percentage of workers engaged in tertiary sector
- 4) Percentage of non-primary workers in rural areas
- 5) Percentage of workers engaged in manufacturing
- 6) Percentage of wholesale and retail trade workers
- 7) Percentage of transportation and communication workers
- 8) Percentage of workers engaged in public sector
- 9) Percentage of professional and technical workers
- 10) Percentage of administrative and managerial workers

B) Indicators of Social and Physical Infrastructure

- 1) Literacy rate
- 2) Female literacy rate in rural areas
- 3) Percentage of urban population
- 4) Percentage of houses with piped water in rural areas
- 5) Percentage of houses with piped water in urban areas
- 6) Percentage of houses with electricity in rural areas
- 7) Percentage of houses with electricity in urban areas

The data on indicators have been taken from the Census Report of Iran. The data considered for the study pertains to the year 1986 for which the latest county level data is available. Due to lack of data, the counties of Abadan, Andimeshk, Khorramshahr, Sarpole-e-Zohab, Qasr-e-Shirin, Gilan-e-Garb, Abumusa and Kish, could not be included in this study.

The Deprivation Score (DS) method used by United Nations Institute for Social Research for measuring social development, was employed to construct composite indices. The formula is as follows:

$$DS = \frac{\text{Maximum Value} - \text{Actual Value}}{\text{Maximum Value} - \text{Minimum Value}}$$

This method measures the relative backwardness of various counties vis-a-vis the most developed county. It shows how much a particular county is behind from the most developed one.

In the present paper, the counties have been divided into two different groups of very backward and relatively backward. If the value of a composite index for a county is more than the "mean + 1STD", it has been treated as "very backward", with respect to that particular dimension. If a county had a composite index of more than "mean" but less than "mean + 1STD", it was considered as "relatively backward" county.

To measure the inequality among counties, the weighted coefficient of Variation (C. V), sometimes known as the Williamson Factor, have been used. The coefficient of variation is calculated as follows :

$$CV = \frac{\sqrt{\frac{\sum_{i=1}^n (X_i - \bar{X})^2}{n}}}{\frac{\sum_{i=1}^n X_i}{n}}$$

Where;

CV = coefficient of variation

X_i = value of indicator of the i th county.

\bar{x} = average value of indicator for the country.

N = Number of counties.

Finally, to find out the relationship between economic and social backwardness , correlation between two dimensions has been calculated.

Discussion

Economically Backward Counties

From the point of view of economic structure, 29 counties have been identified as very backward. The highest deprivation score was recorded by khodabandeh county (9.41) , in zanzan province and the lowest by Tehran county (3.36) in the province by the same name. The economic backwardness are related with regions which are dominated by subsistence agriculture. These counties are located along the zagros mountains, starting in the north-west to Balochestan in the southeast. Natural conditions, such as climate, soil type, and accessibility, are difficult all over but differ within. On the high mountainous, climate is extremely cold in winter, and small agricultural holdings allow only seasonal agriculture. The arid climate in the south-east permits sporadic agriculture in a few favored spots, where water is available. Mining and industrial activities in this region have not been appropriately developed. Thus the harsh natural conditions, coupled with few opportunities in economic sphere outside primary sector, have created a scenario of economic backwardness in general. Table 1 indicates the economically backward counties of Iran. The spatial distribution of backward counties are presented in Map 1. It indicates that the most economically backward counties are located in the west and southeast regions.

Table 1: Counties Ranked In Descending Order Of Economic Backwardness

Rank	<u>Very Backward</u> County	<u>Relatively Backward</u> County	Rank	<u>Relatively Backward</u> County
1	Khodabandeh	Khash	30	Ashtyan
2	Chahbahar	Lahijan	31	Firuzabad
3	Piranshahr	Astane-e-Ashrafyeh	32	Esfarayen
4	Kahnuj	Torbat-e-Jam	33	Miyandoab
5	Iranshahr	Tafresh	34	Mashiz
6	Hashtrud	Badreh	35	Ali Abad
7	Lordegan	Semirom	36	Abhar
8	Sh. & Chardavel	Dargaz	37	Nur
9	Rudsar	Qaenat	38	Bojnurd
10	Marivan	Gonbad-e-Kavus	39	Babol
11	Saravan	Quchan	40	Kordkuy
12	Qorveh	Mehran	41	Tavalesh
13	Sardasht	Maku	42	Malayer
14	Sarband	Fuman	43	Amol
15	Sepidan	Faridan	44	Neyshabur
16	Dehloran	songor	45	Sanandaj
17	Izeh	Eslamabad-e-Garb	46	Marvdasht
18	Baneh	Sowmaeh Sara	47	Tuyserkan
19	Ahar	Torbat-e-Heydarieh	48	Darab
20	Bijar	Farsan	49	Naqadeh
21	Sarab	Baft	50	Khomeyn
22	Jiroft	Minab	51	Natanz
23	Freidunshahr	Meshkinshahr	52	Salmas
24	Aligudarz	Tayebad	53	Khoy
25	Takestan	Zabol	54	Borujen
26	Moghan	Mahabad	55	Masjed Soleyman
27	Saggez	Boyerahmad Sardsir	56	Shushtar
28	Kohkiluyeh	Neyriz	57	Nahavand
29	Mamasani	Khalkhal	58	Sabzevar
			59	Ardabil
			60	Eqlid
			61	Bam
			62	Ferdows
			63	Gonabad
			64	Maragheh

Backwardness in Social and Physical Infrastructure

The spatial pattern of backwardness in social and physical infrastructure is slightly different from that of economic structure. The highest deprivation score in this context has been recorded by Piranshahr (5.78) in W.Azərbayjan and the lowest by Tehran County (0.019). Most of the counties with high deprivation score are located on the border adjacent to Afghanistan, Pakistan, Iraq, Turkmenistan and Azərbaycan Republic (Map 2). The juxtaposition of the peripheral part of Iran with the backward regions of the neighbouring countries is the explanation for the backwardness of these regions. It shows that the diffusion of technology from the core to the periphery is quite weak. The backward counties in respect of social and physical infrastructure are listed in Table 2.

Table 2: Counties Ranked in Descending Order of Social Backwardness

Rank	<u>Very Backward County</u>	<u>Relatively Backward County</u>	Rank	<u>Relatively Backward County</u>
1	Piranshahr	Qorveh	35	Shahr-e-Babak
2	Chahbahar	Ardabil	36	Salmas
3	Sh. & Chardavel'	Torbat-e-Jam	37	Gonbad-e-Kavus
4	Sardasht	Fuman	38	Dasht-e-Azadegan
5	Baneh	Esfarayan	39	Marand
6	Ahar	Khoy	40	Mehran
7	Iranshahr	Dehloran	41	Bandar-e-Abbas
8	Kahnuj	Freidunshahr	42	Shirvan
9	Saqqez	Sarband	43	Sabzevar
10	Hashtrud	Paveh	44	Dashti
11	Marivan	Sarab	45	Neyshabur
12	Kinash	Tavalesh	46	Langarud
13	Minab	Maragheh		
14	Zahedan	Ganaveh		
15	Izeh	Baft		

Continued Table 2: Counties Ranked in Descending Order of Social Backwardness

Rank	<u>Very Backward</u> County	<u>Relatively Backward</u> County
16	Moghan	Miyaneh
17	Tayebad	Daiyer
18	Meshkinshahr	Jiroft
19	Saravan	Quchan
20	Birjand	Qeshm
21	Songor	Nagadeh
22	Mahabad	Aliqudarz
23	Maku	Lahijan
24	Khodabandeh	Darab
25	Kohkiluyeh	Masjed Soleyman
26	Oaenat	Tuysarkan
27	Miyandoab	Torbat-e-Heydarieh
28	Zabol	Boyerahmad Sardsir
29	Bijar	Sowmaeh, Sara
30	Sanandaj	Eslamabad-e-Garb
31	Kangan	Bandar-e-Lengeh
32	Khalkhal	Tangestan
33	Lordegan	Dargaz
34	Bojnurd	Rudsar

Overall Backwardness

Naturally, the pattern of overall backwardness is more or less the same as that of economic and social backwardness. In overall terms,

Piranshahr (15. 07) is noted for the highest deprivation score. In all, 32 counties have been identified as very backward and 53 counties as relatively backward (Table 3).

The spatial contours of backwardness are in congruence with core-periphery

model of development (Map 3). It was heartland of the country, centred on Tehran, which attracted most of the industrial, service and business activity. Agriculture also gained from the prevailing economic ethos. On the other hand, the peripheral regions experienced lagged behind and relied over time on growth chiefly driven by core area. Resource, capital and labour flows linked the two sub-regions, stimulating and sustaining growth in both areas but in a differential manner.

The second feature of the pattern indicates that the most backward counties are located in hill areas in the west and north-west and arid and semi-arid areas in the east and south-east. This dimension of the pattern highlights the role of physical factors in backwardness. Harsh climatic conditions and difficult accessibility are the barriers to development and agriculture suffers, in particular.

The third feature of the pattern shows that the backward regions are inhabited mostly by the ethnic minorities, including Azaris, Kurds, Arabs, Lors and Baluchis. Iran had a centralized planning machinery till recent past. Hence the participation of these minorities confined to local areas, in planning and implementation of development plans was low.

An effort was also made to find out the relative magnitude of regional disparity in respect of different parameters. The calculated value of the Coefficient of Variation (C. V) for economic structure, Social and physical infrastructure and overall backwardness are 0. 15, 0. 44 and 0. 21 , respectively. This C. V. has been calculated for deprivation scores, therefore, higher the value of C. V., lower is the inequality and vice-versa. Evidently inequality in respect of economic development is of much higher order than in social and physical infrastructure development.

To spell out the relationship between economic backwardness and social backwardness, the coefficient of correlation for these two dimensions was calculated. The obtained correlation value is 0.68. It shows a strong correlation between the two, that is higher the economic backwardness, higher is the social backwardness and vice-versa.

Table 3 : Counties Ranked in Descending Order of Overall Backwardness

Rank	<u>Very Backward</u> County	<u>Relatively Backward</u> County	Rank	<u>Relatively Backward</u> County
1	Piranshahr	Rudsar	33	Nagadeh
2	Chahbahar	Fuman	34	Kangan
3	Sh. & Chardavel	Zabol	35	Darab
4	Kahnuj	Jiroft	36	Tuyserkhan
5	Iranshahr	Khalkhal	37	Paveh
6	Sardasht	Miyandoab	38	Neyriz
7	Hashtrud	Aligudarz	39	Faridan
8	Khodabandeh	Lahijan	40	Masjed Soleyman
9	Baneh	Birjand	41	Farsan
10	Ahar	Quchan	42	Daiyer
11	Marivan	Bojnurd	43	Miyaneh
12	Saravan	Esfarayen	44	Semiroom
13	Saqqez	Baft	45	Salmas
14	Izeh	Sanandaj	46	Mashiz
15	Lordegan	Sepidan	47	Neyshabur
16	Khash	Dargaz	48	Firuzabad
17	Moghan	Torbat-e-Heydarieh	49	Shahr-e-Babak
18	Qorveh	Sowmaeh, Sara	50	Sabzevar
19	Minab	Ardabil	51	Malayer
20	Bijar	Eslamabad-e-Garb	52	Babol
21	Kohkiluyeh	Tavalesh	53	Dasht-e-Azadegan
22	Taybad	Khoy		
23	Meshkinshahr	Gonbad-e-Kavus		
24	Sarband	Boyerahmad Sardsir		
25	Dehloran	Astane-e-Ashrafyeh		
26	Songor	Tafresh		
27	Maku	Mehran		
28	Qaenat	Takestan		
29	Mahabad	Mamasani		
30	Freidunshahr	Zahedan		
31	Sarab	Maragheh		
32	Torbat-e-Jam	Badreh		

Conclusions and Suggested Strategies

All the spatial patterns which have been discussed in this paper clearly show that the central part of the country is more developed and as we move to the periphery the level of development declines. The analysis also indicates that the economic backwardness is more critical than social and physical infrastructure backwardness. A positive relationship between economic backwardness and social backwardness has also been observed. The backwardness of hilly and border regions was noted in particular. There is, therefore, a need to reorient the current efforts, in the sphere of development. Keeping in view the findings of our study, three basic strategies are suggested for the purpose.

i) Hill Area Development Strategy:

In the hill areas, the natural resources, including minerals, forests, soils and water have not been utilized in an appropriate manner. There is a need to promote a variety of local resource activities in their case. Hence the strategy of hill area development would aim at:

- diversifying the economy of these regions;
- formulating a sustainable and integrated development plan for hill areas;
- providing market facilities through identification of service centres and central villages; and
- extending social and physical infrastructure to facilitate accessibility and social development.

ii) Strategy of Border Areas Development :

The core-periphery scenario, which is the pattern of development in Iran has, led to a neglect of the border areas. There is no strong economic linkage between the core and the periphery and diffusion of development from the centre to the border is quite weak. From the point of view of economic development border areas do not attract the strategic and basic industries and socially they are influenced by the

adjacent countries. Therefore, these regions need a special strategy and more attention should be paid to social development of these regions. To spread the economic development to these areas, transportation and communication infrastructure have to link the borders to the centre in such a manner that they create corridor of development from centre to the border.

iii) Decentralized Planning:

Finally, structural relationship identified in the core-periphery model indicate disparity between the core and periphery. For reducing this disparity, decentralized planning approach is most necessary. In specific, this strategy should:

- increase the effectiveness of planning machinery, and
- activate the participation of local planners in decision making, planning and implementation

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