

County-wise Levels of Development in Iran

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Abstract

An attempt has been made to measure the levels of development of 253 counties of Iran on the basis of 38 selected indices. The method of research uses a quantitative approach to measure development (factor analysis, HDI, CV) and computer software of SPSS.

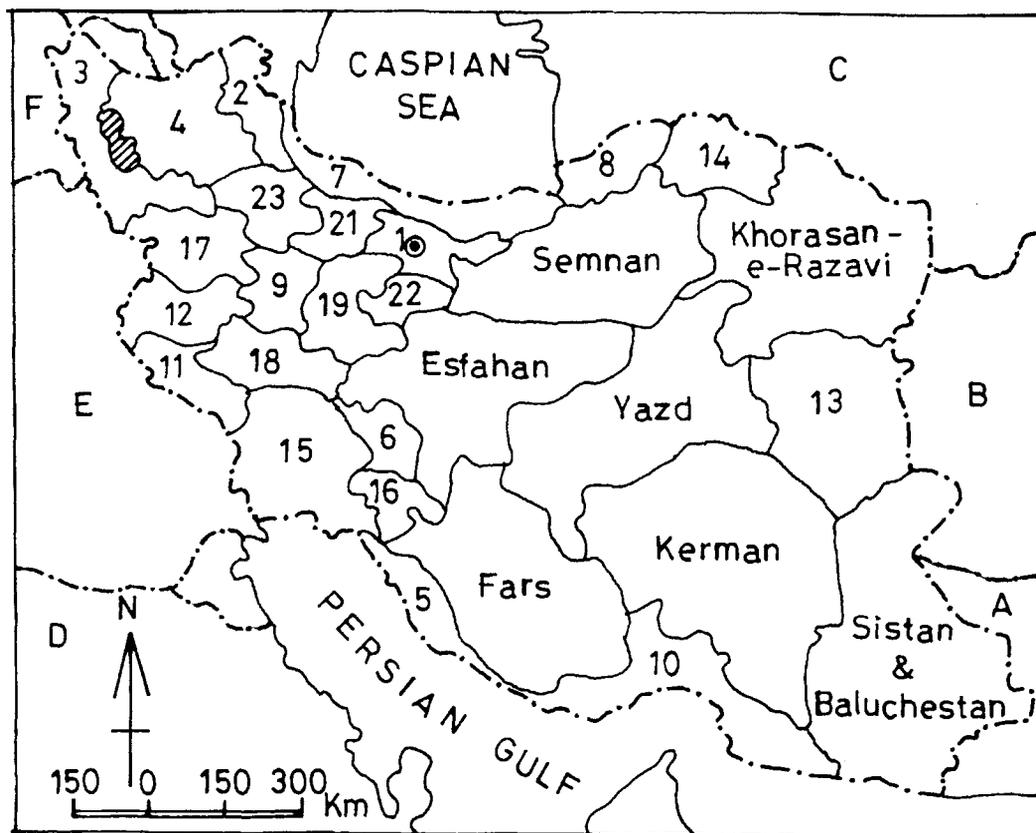
On the basis of 38 blended factors, 22 counties fall in the category of 'developed', 116 counties 'partially development' and 114 are 'undeveloped'. The important point to note is that the precedence of Tehran and its incongruency with respect to the other counties is due to the greater facilities of development provided to it, being the official and political centre for more than two centuries and the metropolitan city for half a century. On the other hand, e.g. Tehran, Mashad, Isfahan, Shiraz and Tabris have emerged as growth poles especially after the land reform in 1962 as the result of political economy. Neglecting people's participation in the formulation of development plans, the centralised policy has stimulated the growth of few centres, brought to them the benefits from oil earnings and surplus and thus added to the regional inequality. These growth poles have developed due to the provision of facilities from the peripheral counties, using national resources but without disseminating much growth to the periphery. In the first part the paper discusses the results of the different factors analysed, while the second part looks for the causes of the regional imbalance in Iran.

Introduction

Studies on regional development in Iran are mostly related to identifying the levels of provincial development and ascertaining the disparities between provinces (Map 1). These studies assume a homogenous pattern within provinces. A pioneering study of this nature was conducted by the Battle Consulting Company in 1972. Iran was divided into 11 macro-regions, and regional disparities were identified on the basis of

this classification. The study on National Spatial Strategy Plan, by Scet-Iran (1976) identified a huge gap in the development process between provinces on the basis of 45 socio-economic indicators. Amirahmadi and Atash (1987) examined the inter-provincial disparities as of 1956 and 1984 and the dynamics of such disparities, and classified the provinces on the basis of their development levels. Shabatoghli (1991) in his study used 26 socio-economic indicators

Administrative Divisions of Iran



Location of the thirty provinces or *ostans* of Iran (first order of administrative divisions):

- | | |
|-----------------------|------------------------------|
| 1. Tehran | 2. Ardebil |
| 3. West Azarbayjan | 4. East Azarbayjan |
| 5. Bushehr | 6. Chaharmahal va Bakhtiary |
| 7. Gilan | 8. Golestan |
| 9. Hamedan | 10. Hormozgan |
| 11. Ilam | 12. Kermanshahan |
| 13. Khorasan-e-Jonubi | 14. Khorasan-e-Shomali |
| 15. Khuzestan | 16. Kohkiluyeh va Boyerahmad |
| 17. Kordestan | 18. Lorestan |
| 19. Markazi | 20. Mazandran |
| 21. Qavin | 22. Qom |
| 23. Zanzan | |

A. Pakistan, B. Afghanistan, C. Turkmenistan, D. Saudi Arabia, E. Iraq, F. Turkey

for measuring disparities between counties at inter-provincial, rural-urban and inter-city levels. The Urban Planning and Architecture Research Center of Iran (1991) tried to obtain a comparative picture of the socio-economic and industrial development levels of different provinces. Amirahmadi (1992) ranked the Iranian provinces on the basis of development levels and construed the provincial disparity map of the country. The Regional Planning Office (1994), in a recent study, has divided all provinces into three groups on the basis of per capital gross domestic product and also ranked them according to pre-capital expenditure. Hosseinzadeh (2001) believed that the unfounded policies of the past are the main causes of disparities in the provinces of Iran. Mansouri (1996) mentioned that the causes of disparities between the counties of the provinces in Iran have been due to historical, natural and political factors. Movahed (1997) and Eslami (1993) believed that the causes of county-wise disparity in the provinces of Iran are based on the location of industries in and around big cities.

All these studies have shown that considerable efforts were made to measure the level of provincial development and to spell out the development gap among provinces. It is important to note that these imbalances exist not only at the inter-provincial level but are also crucial within provinces. A developed province may contain some counties which are suffering from backwardness in terms of social or economic development. On the other side, in less developed provinces, there may exist some pockets which enjoy high levels of development and dominate the socio-economic activities of the entire province. Thus, for the adoption of any regional

development policy at the micro-level and for the creation of balanced spatial development within provinces, the identification of intra-provincial disparities (between Counties) is a prerequisite. There is no study which examined the interregional (Counties) disparity in Iran. Therefore, the present paper can be deemed as a pioneering effort in the respect.

The geographical areas covered in this study include the 253 Counties (Regions or *sharestans*, second order administrative level) of Iran. The boundaries of each County are as shown in the latest census (1975). Then the data is extracted for the 38 selected indices of socio-economic, cultural, health and physical factors. These selected indices are based on the National Spatial Strategy Plan of Iran (Amayesh-e-Sarzamin). Factor Analysis, Human Development Index (HDI) and Coefficient of Variation are used. According to the Factor Analysis technique, the 38 selected indices in the 253 Counties were reduced to 6 factors. The main objective of the study is to measure the level development of Counties (regions), to identify the degree of inequality and the gap between counties as well as the spatial pattern of regional development.

Ranking according to Socio-economic Factor

Twenty variables were loaded for this factor, covering the socio-economic indices. Studies indicate that the County of Tehran is the most prosperous while the County of Jâsk the most deprived county. According to all the factors applied, County of Tehrân was put aside from the calculations as a heterogeneous element because of its much higher level in the development indices as

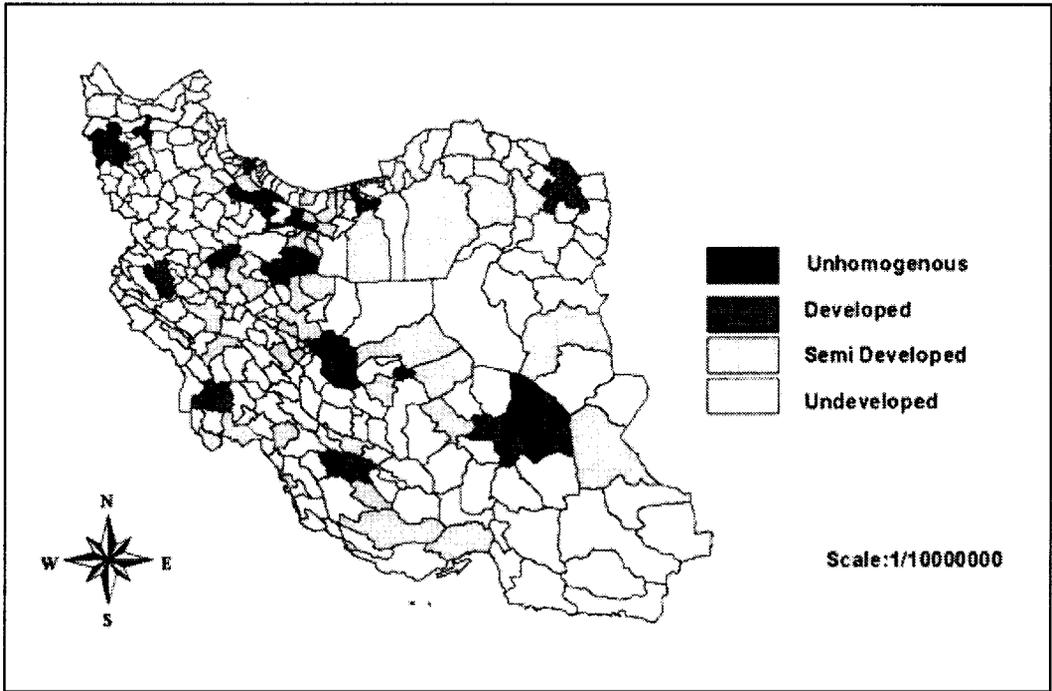


Fig. 1: Spatial Distribution of Development Levels Based on Socio-Economy Factors

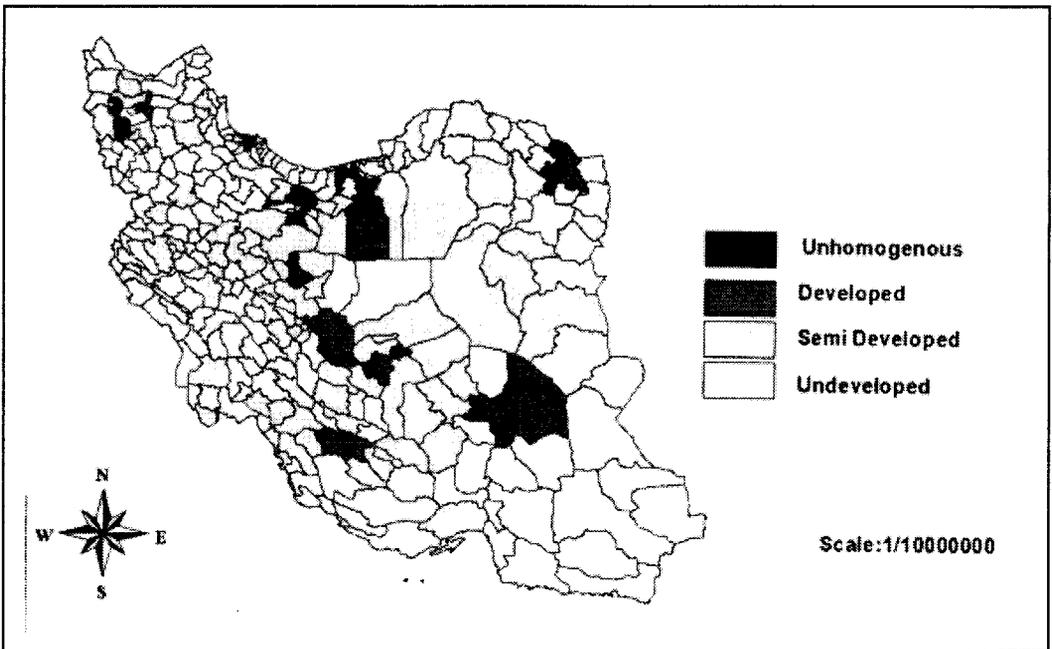


Fig. 2: Spatial Distribution of Development Levels Based on Population and Education Factors

compared to the other counties. 16 counties, comprising approximately 6.3% of the total number of the counties throughout the country, were identified as developed, 53 counties, comprising approximately 21%, as relatively developed, and 184 counties, approximately 73.9%, as deprived counties. According to this factor, about 11 counties, i.e. Arâk, Bandar Abbâs, Zanjân, Shahr Kord, Ardabil, Bushehr, Gorgân, Khorram Âbâd, Sanandaj, Zâhedân and Semnân, which are provincial centres, are among the relatively developed counties while the County of Boyr Ahmad is a deprived county.

Fig. 1 shows that some developed counties are those, which play a central role in the region, and the further the distance of the counties from the developed centres, the less the degree of development will be. Deprived counties are mostly border, mountainous or peripheral ones.

According to this factor, Tehrân Province, with a higher development degree of development (22.2%) is the most developed and the counties of Ardabil, Ilâm, Bushehr, Chahâr Mahâl Bakhtiâri, Zanjân, Semnân, Sistân and Baluchistân, Kurdistân, Kohiluye and Boyr Ahmad, Golestân, Lorestân, Markazi and Hormozgân are the most deprived counties.

The counties in Iran are considerably different from each other according to this factor, so that their coefficient of variation (C.V.) was 0.92, which indicates the distribution and inequality of the indices among the different counties.

Ranking according to the Population v. Education Factor

Five indices were loaded for this factor, including the literacy coefficient, the

women's literacy coefficient, the number of women graduates from rural areas, the number of libraries and the inverse of the guardianship load. This factor is so effective in socio-economic development that it is known as the human resource approach and, focusing on education, it is known as the key to development (Fakuhi, 2000, p. 19). The role of education in economic development is so important that most thinkers consider it as the basis for rapid economic development in the world, improvement of living standards and increasing manpower efficiency (Gylfason, 2001, p. 851). More than 74% correlation of this factor with the socio-economic factor confirms this. This correlation indicates that counties with a high level of education are in a good condition in terms of socio-economic indices as well. On the basis this factor, Tehrân is the most prosperous and Jâsk the most deprived county. Of the total of 253 counties of Iran, 20 are developed, 103 relatively developed and 130 deprived (Fig. 2). From among counties that represent provincial centres, seventeen, i.e. Bandar Abbâs, Bushehr, Shahr Kord, Kermânshâh, Urmia, Hamedân, Gorgân, Arâk, Zanjân, Ilâm, Qom, Qazvin, Khorram Âbâd, Sanandaj, Ardabil and Boyr Ahmad were identified as deprived. From among the counties that are not provincial centres, ten, i.e. Bâbol, Shemirânât, Rey, Anzali, Bâbolsar, Taft, Qâem Shahr, Kâshân, Karaj and Shahriâr, are identified as developed according to this factor. Some counties could reach high levels of development because of their proximity to Tehrân and thus benefiting from the privileges of the capital and some others because of their academic leadership role. According to this factor, Tehrân appears at the highest level and the

tribal border province of Kermânshâh at the lowest level of development. More than 51.4% of the counties of Iran are deprived according to this factor. The degree of inequality between the counties was 58%, which shows a smaller degree of divergence and heterogeneity between the counties.

Ranking according to the Housing Facilities Factor

This factor consists of 4 indices, rural houses having telephone utility, percentage of urban houses with piped water, percentage of rural houses with piped water and the inverse of family to household ratio. According to this factor, Tehrân was the most prosperous and the County of Khâsh in Sistân and Baluchistân Province the most deprived county. In addition, out of the total of 253 counties, 134 are prosperous, 75 relatively prosperous and 44 deprived (Fig 3). According to this factor, none of the counties that are also provincial centres were deprived, and only 4 counties namely Kermânshâh, Khorram Âbâd, Urmia and Ardabil were recognized as relatively prosperous. Deprivation is due to factors such as the tribal and political structure, being located at the border and far from the centre, high population density, weak political economy, mountainous relief and the resulting problems in supplying the necessary services for the residents due to the high infra-structural costs, rural distribution problems and inefficient local executive bodies.

The study of the spatial distribution of the levels of development in the provinces of Iran shows that the counties of the Province Tehrân are 100% prosperous, while the counties of the Province Sistân and

Baluchistân are 71.4% prosperous, representing the most and least prosperous counties, respectively. Development of the counties in Tehrân Province is due to its administrative and political centrality, good geographical location, thus benefiting from being close to political power, savings in economics of scale, communication and infrastructures. In addition, deprivation of the counties in Sistân and Baluchistân Province can be attributed to such factors as lack of infrastructures, e.g. transportation, communication, inhospitable desert environment, low population density, great distance from the centre, and the added problem of drug trafficking in this border province.

The study of the regional disparity according to this factor shows relative homogeneity and convergence between the counties in terms of development indices. The coefficient of variation obtained was 0.32, which is much lower and more homogeneous than in the case of other factors.

Ranking according to the Health Services Factor

According to this factor, Tehrân emerges as the most prosperous and Poll Dokhtar in Lorestân Province as the most deprived county. Out of the total 253 counties, 87 are prosperous, 29 relatively prosperous and 137 deprived (Fig. 4).

The spatial distribution of the levels of development in the counties throughout the provinces of Iran indicates that the province of Kermân with 70% prosperous counties and the border province of Ilâm with 100% deprived counties represent the most and the least health serviced provinces, respectively.

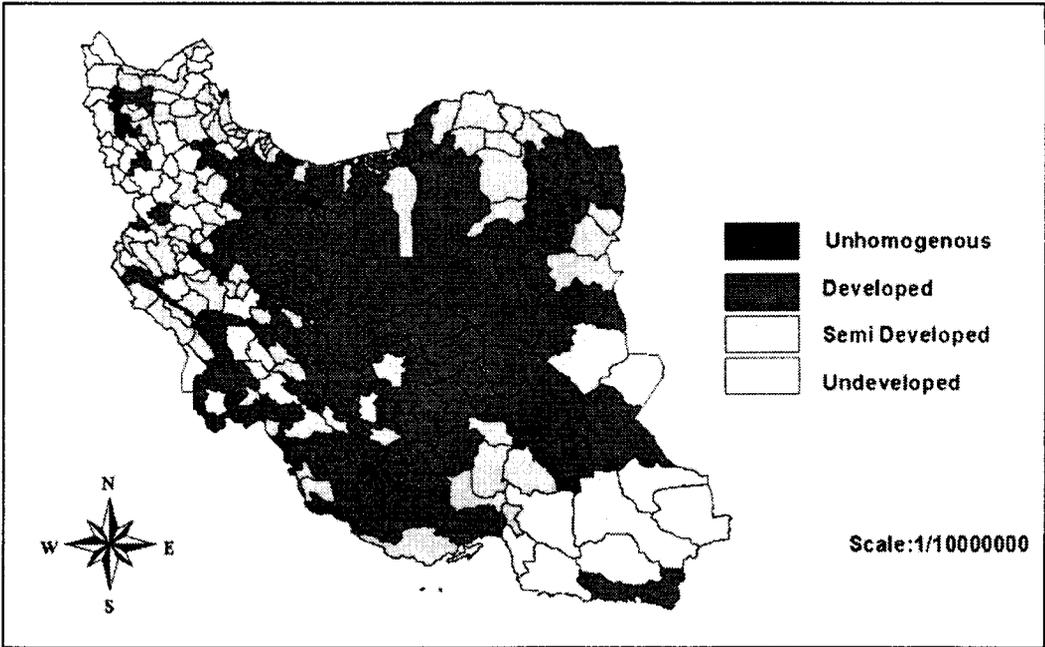


Fig. 3: Spatial Distribution of Development Levels Based on Housing Facilities Factors

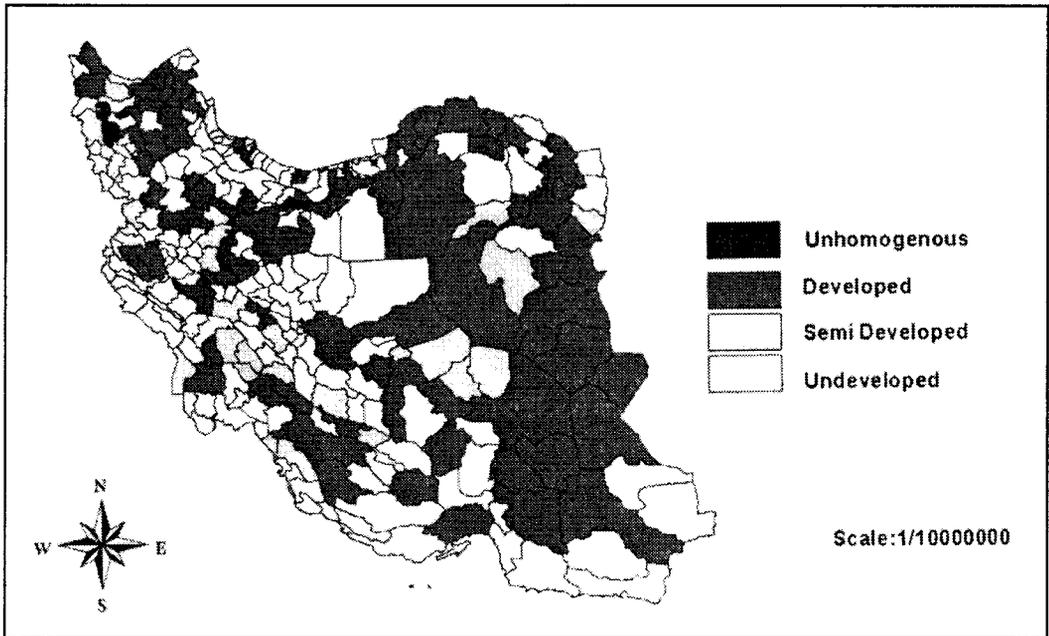


Fig. 4: Spatial Distribution of Development Levels Based on Health Factors

The deprivation of Ilâm Province is due to its special geographical and cultural conditions, its borders with Iraq and the many damages that it suffered during the Iran-Iraq war.

The inequality, gap and heterogeneity in health services between the counties of the country are not that much. The coefficient of variation according to this factor is 0.46. After the housing facilities factor, this factor has the highest degree of homogeneity among counties.

Ranking according to the Employment Factor

The inverse indices of unemployment rate, women's participation rate and women's employment coefficient were loaded according to this factor. The degree of participation of women in the socio-economic aspects is one of the reliable indices that are nowadays taken into consideration in measuring the level of development. This index is as important for development as the other indices such as per-capita production, illiteracy rate and per-capita energy consumption (Fakuhi, 2000). According to the employment factor, the County of Tehrân is, as expected, the most prosperous and the County of Poll Dokhtar the most deprived county.

Further, out of the total 253 counties in Iran, 31 are prosperous, 84 relatively prosperous and 138 deprived (Map 5). From among those counties that are provincial centres, 10 counties, i.e. Zanjân, Urmia, Bandar Abbâs, Shirâz, Gorgân, Sâri, Arâk, Ilâm and Hamedân are relatively prosperous and 8 counties, i.e. Rasht, Khorram Âbâd, Zâhedân, Ardabil, Ahvâz, Kermânshâh, Sanandaj and Boyr Ahmad are

deprived. Counties that are prosperous according to this factor but do not form provincial centres are located in the provinces of Tehrân, Esfâhân and Yazd, and at the centre of Iran. These counties have achieved a good position in the regional system of Iran because of the propagating effects of development of provincial central regions, savings due to the concentration of industries, creation of job opportunities due to industrial growth and policy of inflation centres in all civil programs. According to this factor, the province of Yazd has the highest number of prosperous counties and of Khuzestân the least. Although Khuzestân is an oil-rich province and is well placed in terms of agriculture in Iran, it has not been able to maintain its position, because of some poor counties within the province, the damages caused by the eight-year Iran-Iraq war, the economic and political inefficiency and the presence of the Arab tribes.

Inequalities according to this factor are expressed by gaps and heterogeneity among the counties. In general, the county or regional disparity according to this factor shows a coefficient of variation of 0.51.

Ranking according to the Natural and Economic Infrastructures Factor

This factor covers three indices: length of roads, expanse of cultivated areas and per-capita energy consumption. The indices of each of these factors indicate the expanse of the activities and the degree of development of the counties. Length of roads indicates development in terms of road networks and communication in a county. Per-capita energy consumption is another parameter and the more it is used in a county, the wider the expanse of the industrial,

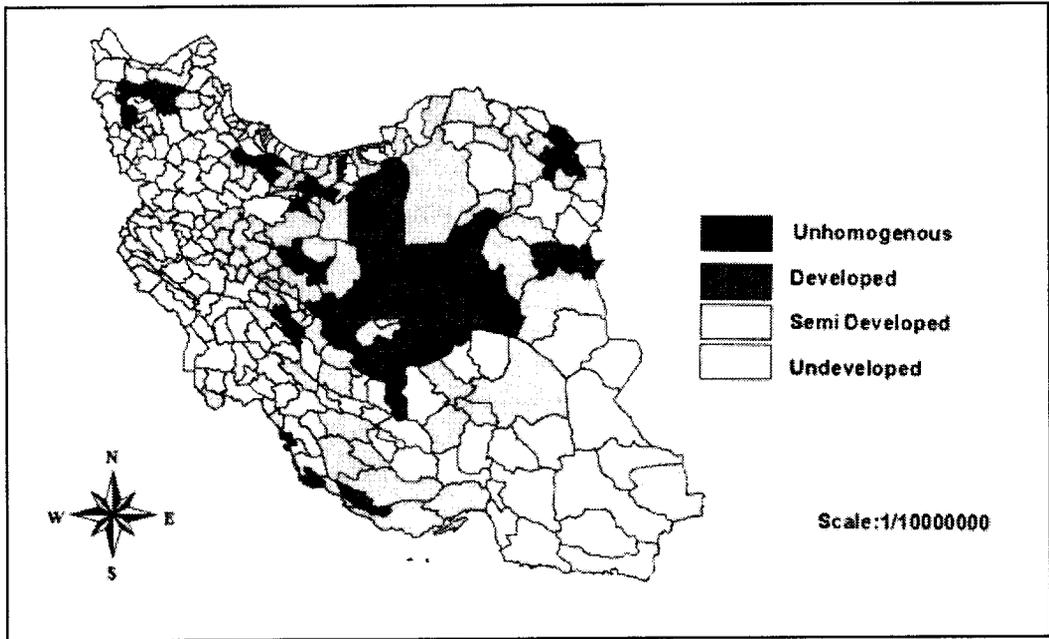


Fig. 5: Spatial Distribution of Development Levels Based on Employment Factors

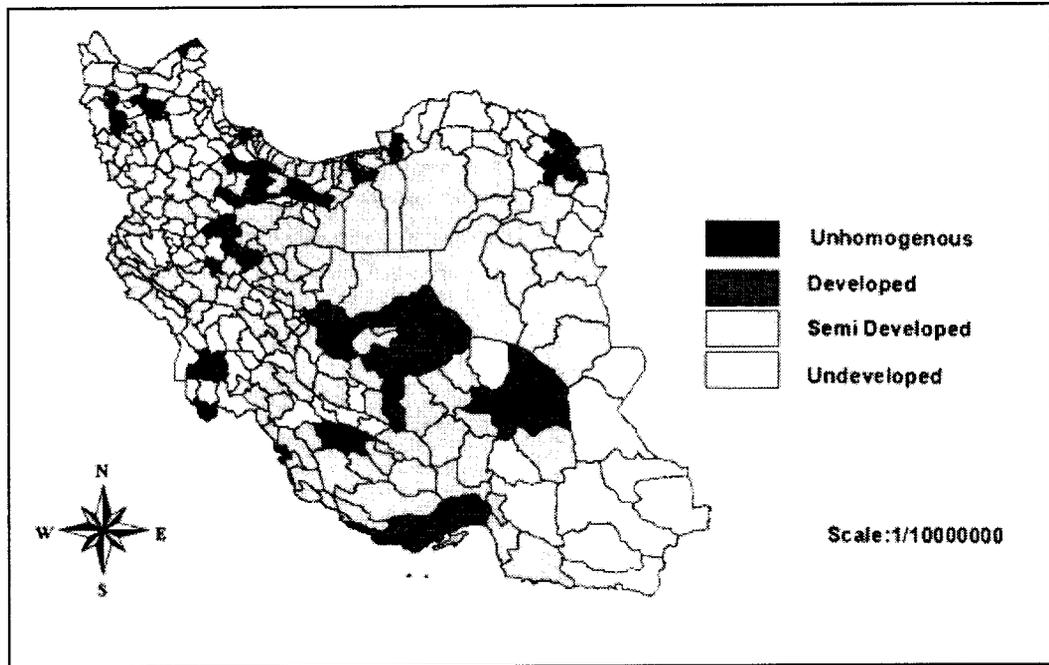


Fig. 6: Spatial Distribution of Development Levels Based on Infrastructure of Physical and Economic Factors

household and service-providing activities in that county. This in turn results in more employment and income in that county. The index of development of the cultivated area indicates more prosperity in terms of climatic conditions and agricultural lands besides reflecting the scientific and technical progress in agriculture. Comparing the levels of development between different counties in Iran indicates that Tehrân is the most prosperous and the border county of Nik Shahr in the border province of Sistân and Baluchistân the most deprived (Fig. 6). From among counties that are provincial centres, the counties of Ardabil, Semnân, Boyr Ahmad, Ilâm, Qom, Khorram Âbâd and Shahr Kord are relatively developed and the counties of Kermânshâh, Sanandaj and Zâhedân deprived.

Deprivation of counties according to this factor is due to the lack of appropriate roads, the presence of deserts in southeastern Iran and mountains in western Iran, great distance from the centre, lack of major investment by the private sector, low potential, and undeveloped mechanized agriculture.

Levels of spatial distribution in the provinces indicate that Qazvin Province with 66.7% prosperous counties and Khorâsân Province with 77.3% deprived counties have the biggest and smallest number of prosperous counties, respectively. Although Khorâsân Province is in a good position among the provinces of Iran in terms of development, however, the existence of deprived counties with problems in their communication network, scattered settlements and lack of water and soil resources in southern Khorâsân have resulted in it having the smallest number of prosperous counties.

The study of the differences among counties according to this factor indicates a C.V. of 0.58 and heterogeneity and convergence between the counties.

Ranking according to a Combination of the Indices

38 indices from the different factors were combined to show the inequality of the counties in question. The results indicate that Tehrân with its administrative, political and economic centrality for more than two centuries and being a metropolis for more than half a century, has been able to maintain its dominance and superiority in the regional and urban system of Iran, while the distance between it and the other regions has been increasing. Therefore, it was excluded from the calculations. Studies carried out according to this combination of indices show Tehrân as the most prosperous and the border county of Nik Shahr in the border province Sistân and Baluchistân as the most deprived county. From among those counties that are provincial centres, the eight counties of Ardabil, Gorgân, Semnân, Bushehr, Zâhedân, Boyr Ahmad, Sanandaj and Ilâm have not been able to maintain their developmental position and have appeared as 'relatively developed' counties in the hierarchical regional system of Iran. Four counties of Bâbol, Shahriâr, Kâshân and Shemirânât, because of their closeness to the centre and benefiting from the spatial and propagating effects of developed regions, are identified as developed counties in the spatial organization of Iran.

More than 44 percent of the counties of Iran are deprived counties. The majority of the deprived counties are in the provinces of Lorestân, Kermânshâh, West Azerbaijân,

Ardabil, Ilâm, Bushehr, Chahâr Mahâl and Bakhtiâri, Khuzestân and Sistân and Baluchistân. Most deprived (counties) regions are located in the peripheral border provinces, affected by greater distances from the centre, economic and political inefficiency, weak trickle-down effects from the more developed regions, inappropriate allocation of resources, climatic problems and underdevelopment of roads and communication systems, lack of facilities and their incompatibility with the needs of the population. According to this factor, Tehrân with 44.5% prosperous counties has the largest number of prosperous counties in Iran (Fig. 7).

Overall, a C.V. of 0.63 and a development gap of 3.9 indicate different degrees of prosperity according to the combination of indices among all the 253 counties in Iran.

Causes of Regional Imbalances in Iran

In general, six groups of factors have been effective in explaining the degree of inequalities among the various counties of Iran (with varying degrees depending on each region).

The Natural Factor

Due to inappropriate resource utilisation, natural potentials have not played an important role in the development in Iran. This research indicates a weak correlation between the natural factors and the degree of regional development or prosperity. The geographical region of Zagros in western Iran has a great potential for development because of its climatic conditions, soil, water resources, rainfall and mines. However, the environmental potentials in the region could not be developed; geographical constraints

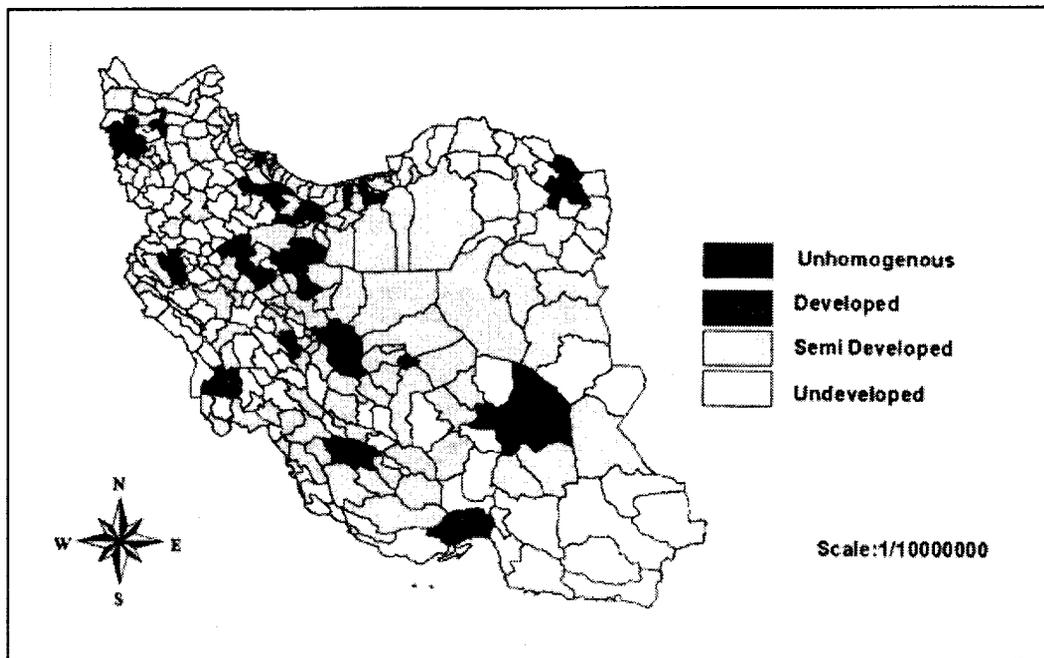


Fig. 7: Spatial Distribution of Development Levels Based on Component Indices

(being located on the border), mountainous terrain, communication and access problems, impact of the war, tribal and cultural problems, high costs of civil and infrastructural works, scattered rural settlements and weak communication networks in the regions as well as the greater distance from the axes of development have all contributed to the deprivation in this region. The coastal region covers the shore of the Persian Gulf and the Oman Sea (Indian Ocean) in the south and the Caspian Sea in the north. The coastal areas in the north have enjoyed an average degree of development because of the pleasant weather, fertile lands, big recreation centres of tourism and above all the closeness to relatively developed centres. However, the coastal regions in the south have not achieved a good position because of extreme weather, great distance from the centre and lack of attention by the planners.

In the southeastern and eastern border region, where 90% of the counties are deprived, factors such as insecurity in the region, borders with Pakistan and Afghanistan, drug trafficking, lack of infrastructure, lack of rainfall and widespread deserts, lack of appropriate roads and great distance from the centre have all contributed to deprivation of the regions.

Tribal and Cultural Problems

There is a high degree of tribal and cultural variety in Iran, with *Âzaris* living in East and West Azerbaijân, Ardabil and Zanjân provinces and parts of Qazvin Province and Hamdedân, *Kurds* in the west in the provinces of Kurdistân, Kermânshâh and Ilam, *Lors* in the mid-west in the provinces of Lorestân, Chahâr Mahâl Bakhtiâri,

Kohkiluye and Boyr Ahmad and parts of Fârs, *Arabs* in the southwest in Khuzestân Province, *Balochs* in Sistân and Baluchistân Province and part of Hormozgân Province. The study of the regional inequalities shows that they are strongly related to tribal and cultural issues. An analysis of the political systems in Iran in the last 100 years indicates that governments have always been seeking to form a hundred percent centralistic rule, without considering the geographical conditions and cultural heterogeneity in the different parts of the country, thus concentrating all their efforts to form powerful central governments, despite the peripheral regions being different from the central governments (in terms of language and religion) and suffering from a chronic underdevelopment. The peripheral regions of Iran, having local and tribal identities, were opposed to central governments because of their political and cultural dissatisfactions and did not let them exert their political influence in practice, thus further depriving the regions.

Political Economy

The study of the inefficiencies and heterogeneities in the regional systems of Iran indicates strong economic and political effects in the allocation of resources resulting in the formation of inequalities between regions. In Iran, resources and facilities have been allocated depending on the political rank. In this competition between the regions, most capital and facilities were allocated according to a higher political rank, without taking into account the environmental capabilities and the potentials of the regions. Allocation of capital and resources to politically

influential regions and neglect of uniform spatial development have resulted in the development of the former and non-development of the latter. Economic development in the regions reveal that the facilities and capital allocated to them resulted in attracting investments by the private sector and large companies and, consequently, drawing out skilled and trained manpower from the peripheral regions, thus increasing the deprivation of poor regions and widening the developmental gap between the regions. Therefore, in Iran, the domination of political considerations over all other considerations, relative advantages and capabilities of the regions have been important factors in the formation of deprivations, inequalities and heterogeneities.

Planning System of Iran

One of the most important causes of regional inequality in Iran is the lack of a clear planning system and strategy (Hosseinzadeh, 2001). An increasing economic role for governmental administration due to increased oil income on the one hand, and the presence of different tribes, esp. along the borders, and the historical unrests and segregationist ideas, on the other hand, have strengthened the centralist administration by the government and have, consequently, centralized the development planning and management (Âlemi, 2001, p. 45).

Historical studies of the pre-Revolutionary planning system (1948-79) indicate that the divisions of the goals, policies and rules for allocation of resources were ordered to the State Management and

Planning Organization from above. According to Harvey, "Poor areas are politically weak." (Harvey, 1997, p. 113), in Iran, political considerations dominate economic viewpoints, and it rarely happens that resources are optimally allocated in proportion to the area, population and other realities. As a result of these and also because of the lack of a regional or region-based planning system and the partiality shown by the plans, the regions have never seriously participated in preparing development plans for their counties. Therefore, development plans have been prepared without consideration as to the capabilities, capacities and limitations of the regions. Thus some regions have had an accelerated growth and development while the others have not been able to step on to the path of development. There have been many post-Revolutionary attempts to establish regional balances, to decentralize the planning system and process, and to identify the capabilities and shortages of development in regions. Nevertheless, lack of appropriate regional planning, and lack of coordination between the regional, national (with partial views) and local planning (with anatomic views) authorities in the First and Second Civil Development Plans after the Revolution made them ineffective in terms of creation of a regional balance the way it should be. The Third Development Plan (2000-2004) also has not been formulated carrying out the necessary evaluations.

Growth Poles

One can mention growth poles among the other causes of regional disparity in Iran. Although the role of growth poles in a

county is to consolidate economic growth and development at the national and regional levels rather than entail underdevelopment, the attitude towards economic development based on the development of growth poles in the big urban centres in Iran as means of economic growth not only did not have the effects of spreading development in the peripheral regions, it has, on the contrary, caused imbalance in inter-regional development, in population distribution, favoured economic, social, political and administrative polarisation and least optimal distribution of facilities and services throughout the country. Such an attitude in Iran in recent decades in the Fourth and Fifth civil Development Plan before the Revolution resulted in population and economic concentration by siphoning off the resources and attracting economic activities in a number of centres in the big cities of the country. By creating and developing industries and investment in big cities and partial implementation of the Land Reforms (1962), after which a major part of the rural population did not become landowners, the rural population began migrating to cities and the skilled workforce, capital and raw materials and many other sources of development moved from such peripheral regions to big centres. This process finally resulted in the concentration of economic activities, accumulation of capital and dense population in urban centres, to further widen the gap between regions. Such policies and such orientation increased the number of big cities and concentrated the population in certain points in the country. According to statistics, in the years 1956-1966, there was only one city with a population of more than 1 million and no city with a population of 500 thousand to 1 million, while in 1976

there were 3 cities like the former and 6 cities similar to the latter in terms of population. In the same year, the number of cities with a population of over a million reached 3. In 1996, the population of Tehrân, the primate city, was six million, while the four cities of Mashhad, Esfâhân, Tabriz and Shirâz had a population of more than one million and Kermânshâh, Qom, Karaj and Ahvâz were among the cities with a population of 500,000 to 1 million (Iran Statistics Center, 1956, 1966, 1976, 1986, 1996).

The Superior Growth Pole

The metropolis of Tehrân is the growth pole of Iran. With a 200-year history of being the administrative and political centre and more than half a century the superior growth pole it has maintained its domination and superiority in different branches. The economic, political, cultural, administrative and service-providing concentration in Tehrân has provided the ground for large-scale employment. At the same time, relative stagnancy of activities in the other parts of Iran and the increasing prosperity of Tehrân in terms of better service-providing facilities has accelerated such development. Return of capital with large profits is possible in this city. Consequently, capital flows into Tehrân. Domination of such a trend has resulted in the underdevelopment of the other geographical areas in Iran. Iran is an administratively centralist country. Centralization has had undesirable economic, social, cultural, political and geographical effects and resulted in the concentration of population in certain areas of the country, while preventing an optimum distribution of resources and facilities

throughout the country (Shoku'i, 1998, p. 96). In 1996, approx. 43% of the total number of factories constructed by the private sector was in Tehrân and 47.1% of governmental factories, 42.3% of industrial labour, 51.9% of physicians and more than 50% of university students and lecturers were also based in Tehrân (Iran Statistics Center, 1996). The above statistics show that Tehrân, having more of the development indices than the other areas in Iran, is a heterogeneous element in the regional system of Iran.

The 1st Order Growth Poles

After Tehrân, the four cities of Mashhad, Esfâhân, Tabriz and Shirâz are the biggest centres of urban growth in Iran. Mashhad in the northeast is the second metropolis in Iran because of its pilgrimage economy and its big industries. Esfâhân, the biggest central Iranian metropolis, acts as a superior industry pole. Tabriz, the biggest northwestern metropolis, plays an important commercial and industrial role and Shirâz the big city in southern Iran with its historical and cultural backgrounds is a leading industrial pole. These cities play the same role throughout the region that Tehrân plays at the national scale. The big head of these cities put pressure on the weak and thin body of the region and has created some form of imbalance and constraints on development of the deprived regions.

The 2nd Grade Growth Poles

These development poles include most cities that have a population of over 500,000 and cities that are provincial centres, e.g. Karaj, Ahvâz, Kermânshâh, Qom, Urmia, Yazd,

Kermân, Hamedân, Arâk, Rasht, and Sâri act as growth poles, As provincial centres and due to the concentration of administrative and political institutions, these cities have maintained their superiority and domination in the hierarchical provincial system. Administrative concentration and job opportunities in these cities as compared to the other counties in the province have resulted in the flow of population from the peripheral regions to these cities for the sake of jobs, better welfare facilities and services. The outcome is population agglomeration, economic, cultural and political concentration in these second grade poles, and some form of inequality in terms of spreading development to the backward region.

Economic Duality

The structure of the Iranian economy in the beginning of the present century was an underdeveloped structure based on agriculture. The first official statistics on the gross domestic product of Iran (1959) indicates that the share of agriculture in the gross national product was 36.8% including the added value of oil, and 52.6% excluding the same. At the same time, figures for the industrial sector were 9.9 % and 11.2% respectively, and 42.5% and 48.3%, respectively. Growth of capitalist relations in Iran, concentration of power, formation of new executive institutions, development of the transportation networks and establishment of big modern industries provided the impetus for changing the economic structure (At'hâri, 1992: 17). The 1962 Land Reforms, mainly implemented by increasing the allocation of facilities and capital to the industry sector, had no effect,

except the collapse of traditional production relations and decline in the role of agriculture and its surplus in Iran's economy, and replacement of the economic surplus resulting from oil export (Hâmiân, 1998: 55).

By increasing the oil prices in the early 1970's and multiplication of its price, industrial growth was accelerated in Iran. A flood of goods, raw materials, spare parts and machinery flowed into Iran. The major characteristics of this type of industrial growth were consumption, dependence on foreign machinery and manpower (Râzeqhi, 1988: 29). Implementation of the 3rd, 4th and 5th Civil Plans before the Revolution with the goal of developing industries and encouraging the private sectors for industrial investments and formation of heavy industries in the growth poles (Esfâhân, Arâk, Tabriz, etc), resulted in the marginalisation of the agriculture sector in the Iranian economy, so that the added value share of the industry in 1976, excluding oil, increased to 30%, and the share of agriculture in the same year dropped to 17% (At'hâri, 1993: 18). Growth and development of the industrial sector with emphasis on oil exports and decreasing importance of the agricultural sector created some form of duality in Iran's economy. Big regions have developed by focusing on industry and investing the economic surplus accruing from oil, while the weaker regions, relying on the agriculture sector, were left behind with a decreasing role for this sector. The difference in the income and investment in the various regions of the country widened the inter-regional development gap and created some form of duality of development in Iran. After the Revolution, the bankruptcy of the banking system,

intensive flight of capital from Iran, fall in oil prices, economic sanctions and the imposed war worsened the economic situation of the country. Because of economic crises, raw materials, spare parts and machinery needed for the affiliated industries were not punctually supplied and the industry underwent changes. Therefore, the service-providing sector expanded and, along with this, huge migrations took place from poor areas to the big cities. As a result, the civil plans of the government could not be effective in coordinating and creating a balance between the economic sectors of the country and regional development.

Spatial Regional Development Model in Iran

The analysis of the spatial regional development model in Iran indicates that Iran's spatial structure has two central and peripheral parts. The structure has subsystems within itself, which, at lower scales, can be divided into central and peripheral parts. In Iran, the centre-periphery has not developed proportionately and homogeneously. Rather, there has been an exploiting relationship between the centre and the periphery. The study of the urban and regional system in Iran proves that non-proportionate, imbalanced development of regions in Iran is the outcome of relations between the centre and the periphery, which is a reflection of the development of capitalism on the national and the international scale. Development of capitalistic relationships within a single-product economy relies on oil exports for economic surplus instead of a mature economic surplus from the sale of agricultural products and other goods.

Centralized capitalistic development and investment policies do not apply an equal-opportunity mechanism for all regions and lack a coherent bottom-to-top planning system. The specific characteristics of this process are industrialization, high wages, job opportunities, facilities and services in the central regions, while the peripheral regions, geographically occupying a major part of Iran, have a limited industrialization, little technical innovation, few job opportunities and low wages and living standards. The development of central regions in Iran has been related to the underdevelopment of peripheral regions. The central regions have developed and expanded by attracting economic and social welfare facilities, wealth and skilled and trained manpower from peripheral regions, and they have not had a measurable trickle-down effects on the development of the peripheral regions, and thus some form of divergence and heterogeneity has been created in the spatial development structure of the country. Therefore, it can be said that the model of spatial regional development in Iran is centre-periphery based.

Conclusion

The coefficients obtained with the CV method for the indices (0.92, 0.58, 0.32, 0.64, 0.51, 0.58, and 0.63) indicate a disparity in the degree of development among Iran's counties. This difference is very high in socio-economic indices and low in housing facilities (verification of the first hypothesis). Ranking figures of Iran according to the HDI model indicate that Iran's counties are in three stages: developed, relatively developed and deprived levels (verification of the second

hypothesis). In addition, the results of the study show that the degree of inequality among Iran's counties is high according to economic, social, population, educational and employment indices and low according to housing and health services factors. The gap and inequality between the indices is very high in the counties (verification of the third hypothesis).

In Iran, there is a gross difference between central counties and provincial centres and peripheral counties (regions) in economic and social terms. According to the first socio-economic factor, there are 16 prosperous, 53 relatively prosperous and 184 deprived regions. According to the population v. education factor, there are 20 prosperous, 103 relatively prosperous and 130 deprived counties.

According to the housing facilities factor, there are 134 prosperous, 75 relatively prosperous and 44 deprived regions. According to the health services factor, there are 87 prosperous, 29 relatively prosperous and 137 deprived regions. According to the employment factor, there are 84 prosperous, 31 relatively prosperous and 138 deprived regions. According to the natural economic factor, there are 30 prosperous, 171 relatively prosperous and 52 deprived regions. Then 6 factors were measured as a combination of indices. The findings indicate that there are 24 prosperous or developed, 116 relatively prosperous or developed and 113 deprived counties (regions). Regional disparities in Iran reflect, and are the outcome of such factors as political economy, tribal and cultural problems, inefficient planning system, economic duality and growth poles, which affect the socio-economic, cultural and

political functions of the regions and contributed to the underdevelopment of the peripheral regions. The central regions of the country, because of their geographical location and the special political attention they receive from the government, have achieved a higher position in the hierarchical system of development.

For reasons such as cultural variety, political and economic inefficiency, greater distance from the centre, distance from the main axes of development, the peripheral regions have not been able to achieve a higher level in terms of benefiting from facilities and allocation of resources. Thus, the spatial regional development model in Iran is centre-periphery based. Central regions have developed and expanded by attracting facilities and services from peripheral regions and have had a weak propagating effects on the development of the peripheral regions.

Considering the importance of regional balances in responding to problems, the following suggestions are made for reducing regional inequalities in Iran: Whereas the planning system is of considerable importance in creating regional balances, attempts should be made for eliminating inefficiencies in the planning system and adapting it to regional planning. The planning system in Iran is centralistic, and investments are made without considering the regional capabilities and potentials. In fact, some form of contradiction is noticed between the national and regional plans, resulting in failure and ineffectiveness of regional plans. Therefore, by reforming the planning system that has a regional nature,

so that the regional nature orients the partial nature, a close relationship between the different levels of planning can be achieved.

A Regional Logistics Plan

1. A comprehensive plan is prepared in order to identify the capabilities, potentials and shortages in regions in consultation with the local and regional authorities and the people. Then, according to the limitations, weaknesses, strong points and opportunities and without applying political opinions, a special regional plan is prepared and implemented for each region.
2. Tax exemptions should be given in deprived regions as incentives for private and semi-private investors. This shall be oriented towards elimination of deprivation in poor regions, thus preventing mass exodus and migration from poor to prosperous regions, which can contribute to significantly reducing the regional disparity.
3. Employment opportunities shall be expanded by the government in deprived regions in order to create jobs conforming to the capabilities of the region and the requirements of the population.
4. Creation of new development axes in deprived regions so that the distant regions can also benefit from savings in transport and access to markets as a result of development.

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