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The study of regional disparity status in Guilan province

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Development means boosting human potentials for the improved utilization of his environment. Rational utilization depends on economical, social and cultural particulars. The study of economical and social indicators and the determination of the areas benefit are very urgent in the direction of finalizing development guidelines. Immigration, poverty, low production and efficiency in areas of the region is the result of inefficient performance of economical, social and cultural foundations, agricultural depression, disorganized growth of population and discriminatory policies and the low level of enjoying fundamental facilities and productions. The present study as a descriptive and profound research has been performed with the aim of recognizing development condition of areas in the province and recognizing the challenges and direction of areas development. The result s of the study indicates that there is an inharmonious development in areas and deprivation of regions in new counties.

Key words: Regional disparity, Guilan, Development

INTRODUCTION

Developmental programs must follow the improvement and promotion of the level of life. This not only helps the increase of purchase ability, but also provides some facilities in education, health, welfare and other fundamental facilities. Decreasing regional differences, particularly between cities and villages for preventing human and funds movement and migration are very effective in providing the development. Rural planning is seeking for transformation and improving social conditions and the change of cultural and economical systems of the society for rural development. So, in rural plans, economical, social and cultural objectives are considered (Kamran, 1995).

Development means the increasing of human abilities in well exploiting of his environment. Rational exploiting depends on economical, social and cultural properties. Therefore, every condition that is effective in increasing the abilities in regions, prepares the way for development. Migration, poverty, low production and exploiting, unemployment, etc. in different regions of the country are the result of inefficient operations of economical, social and cultural organizations, overpopulation and discriminatory policies for cities and villages and lack of welfare, producing and fundamental facilities. Although the term development has different

meanings and definitions, it focuses on production increase, efficiency increase, promoting the level of life, removing poverty and deprivation, promoting the level of educational and health facilities, reducing unemployment and providing economical and social requirements (Hosseini , 1991).

Guilan province is located in north of the country, this province has high a relative of density biological.

Statement of the problem

The study of inequality and its aspects in different geographical limits has received the attention of planners and politicians in recent years. Inequality and its different dimensions are the significant signs of undevelopment because the countries are really known as developed that in addition to high economical and social indices, have a rather fair facilities. But in undeveloped countries, there are both low indices and unfair distribution (Mosalla Nezhad , 2005).

Concentration of economical substructures and investment in special places make a severe spatial inequality between the regions of the country in the long run. This has forceful influences in the progress of

production in both developed and undeveloped regions and makes intense regional competitions, aggravation of regional migrations and the movement of capital and labor force. In this case, a region develops and the other misses it.(Johnson,1970) One of the most important cases of inequity is spatial inequity. Spatial inequity means unequal distribution of economical and social facilities and opportunities in area. Spatial inequity causes the place not to be used best, provides the means of geographical accumulation of poverty and the intensity of privation in some regions, weakens national and social coherent, makes the best and voluntarily allocation of human force specially expert human force in regions impossible, increases impolitic migrations and makes the best distribution of the population in space, impossible. In short, spatial inequity increases the probability of poverty, unemployment, marginalization, migration and injustice. Moreover, spatial inequity can harm the basis of national unity and stop the general progress of economy (Chalbi , 1995).

The theoritically, the regional inequities are caused by two basic fields:

1.   First, natural, cultural, social and economical conditions of each geographical region (Natural specifications of regions)
2.   Second, Decisions of policy makers and economical planners.

One of the most fundamental executive policies of the government during development programs is creating regional balances in regions by investment. Recognizing inequity and unbalancing within the framework of different geographical limits is under consideration and the necessities of working in this direction are recognizing the existing condition of every parts of the planning collections such as country, province, city and district and consequently, finding out the existing differences and distinctions and policy making for removing and decreasing the inequities in all parts of the collection. In this field, paying attention to regional inequities in the form of indices is considered as the most important tools of planning that through this, planners will be able to edit and evaluate the procedures and results of their planning in the frame and structure of geographical space. If this procedure receives the attention of planners logically and scientifically, it can show the different aspects of planning clearly in different parts and bring up the planning regions in hierarchical procedure and in the framework of compatible units.(ziari,2004)
These investments are done in developing the activities of production, occupational and self-employment in deprived villages, fulfilling developmental plans in the fields of proper rural ways and electricity delivery, hygiene and water delivery, post and telecommunications

and establishing multi purpose cultural, educational, training, artistic and sports centers in the population centers of deprived regions. [Management organization, second and third plans law]
In order to achieve the above-mentioned objectives, this research tries to determine the rate of Guilan cities in having public equipment, facilities and services by gathering different indices and measures in social, economical, cultural and physical fields and classify and grade them to help the decision makers of different parts in the fields of economical, social and cultural planning for cities by introducing the having and inadequacy rates of each city which is the result of governmental policies and investments. The most important question, considered in this research is whether the governmental investments have been effective in decreasing regional inequity?

RESEARCH METHODOLOGY

This is an inductive, descriptive and profound research. According to the information gathered from all district governments of the province and the information prepared from statistical yearbook and management organization in the field of allocated credits, a data bank has been created in Excel software and by using the method of standardization and Morris's discordant index, the data have been analyzed and rural areas have been classified. Moreover, the collected data are linked to the spatial data layer in the level of the cities of the province in GIS software to make the regional analysis possible and to provide the related maps(Map 1).

Methods of development determination

The methods of standardization method, the deviation between the attribute amounts and the mean is divided by the criterion deviation, the main amounts are standardized, the variables are freed of scale and the compound index is resulted by the algebraic addition of standardized amounts. The following formula is used for converting the index amounts to standard ones:

Where:
Z= Standardized amounts
X_{ij}= Amount of i variable in j region
X_i= the mean of i variable
N= number of regions

Another method is deprivation coefficient. This method is used by UNDP for calculating the human development index of different countries. There are two ways for calculating the deprivation coefficient of regions, that both have same results. In order to get acquainted with the manner of performing this method, refer to the book.

Map1: Guilan Province in Iran

Another method is coefficient of variance (CV). This method which is sometimes called Williamson agent is used for measuring how much an index has been distributed unequally between regions. The coefficient of variance is calculated by the following formula:

Where:
Xi= the amount of one index in a specific region
x= the mean of i index
N= number of regions

This method has been used for examining the procedure of existing disparities in development indexes between regions in large level, which the high amount of CV, indicates more disparity in distributing the above index. (Kalantari, 2001).
Another method is the method of Morris's discordant index. UN's development plan has used a model for classifying regions with developmental (physical or human) view that is both the newest official model used internationally and the ability of developing and substituting them in spaces to be planned in different and various scales, is performable. This method is known as Morris model (Memarzadeh, 1995).
Morris method is one the effective methods in the field of logical combination of regional development measuring indexes that is used in this research.

Introducing the study area

Guilan province is located in the margin of the Caspian Sea. After the collapse of the USSR, Guilan placed on the route of the new transportation system from east to west (Traceca) and from China to Danube, which is the center of Europe, has formed by European Union. .Guilan's special geographical situation in the Caspian Sea region caused the affluence of the north transportation line and made the ex-soviet transit line important and has turned the Caspian Sea from a closed Sea into an open one connected to the oceans and international waterways. In addition to the fact that Iran's industrial and agricultural poles are near Guilan, the above-mentioned routes have also appropriate climate to export traditional goods and foodstuffs and flowers.
  The increasing development of agricultural in Guilan province, came to this point that there is no need for region to import some agricultural products like vegetable, eggs, plants, flowers, etc. All the agricultural goods in the province or neighboring provinces can be transported, both from the sea or ground to Europe. Commercial goods in agricultural section can be transported to the European famous ports or through the Black Sea to Turkey and central Europe or through or through Baku to Dagistan, Chechnya, Ingush, Pittsburg, Ukraine to the West Europe. Guilan is a trade center among the general Asian countries and there is a relationship between Russian products and this province. There exist many an opportunity and capacity for developing different kinds of tourism industries.
  They are so preoccupied with developing ports along with improving the quality of marine transportation, which ensures the opportunities to actively participate in international commerce to affect their economic development. The establishing of free economic zones in the littoral states has an influential effect on their economies. Anzali Free Trade Zone, as far as the

considerable investment done is concerned, e.g., Setareh Shomal, will leave a deep effect on the regional economy.

According to the latest information in governer of Gilan Province in 2008 with 16 city, 43 districts, 4109 villages, 49 cities and has 2694 inhabitants is Abadi. (Gilan governer,1387) Gilan Province is located in the north and features; low extent, frequency and focus of settlement areas, being located in the temperate zone and humid, near Caspian Lake in the north, adjacent to areas with high Alborz Mountains to the south and south West. This focus on deployment status and population activities Prtrakm and inappropriate utilization of regional resources and environmental vulnerability intense search area has had. High rainfall, soil constraints and territorial units, places intense focus on spatial and settlement disorganization instability in some parts of its other features.

Indices used in the research

The most important step in studying regional development is determining development indices. Development indices are in fact the statistical expression of existing phenomena in the region. So, different economical and social variables must be converted to indices within a specific and logical theoretical framework. Different ratios, percents, rates of growth, per capita amounts and etc. are matters that are used logically as development indices within a special theoretical framework.

An important note in the process of indicating is that when development indices are selected, the exact meaning of contexts like diversity and disparity must be considered. In most studies of regional development, the difference between them has been ignored and naturally, selected indices do not have the required accuracy. Disparity is created because of not being able to use natural potentials of a region, best in comparison with other region. While natural diversity is the result of difference in natural talents in different regions. In this field, the related variables of ground profitability and exploiting indicate natural diversity. Therefore, such indices must not combine with other agricultural indices like mechanization level or the rate of using chemical fertilizer, etc. Indices of natural diversity are not related to the development, created by human beings, but relate to structures. So, indices related to structures must separate from indices related to development. While, in many of regional studies the difference between diversity indices and disparity indices, is completely ignored. In some of these researches, natural phenomena like precipitation are considered as development indices and in some others, indices of outputs and inputs are combined with each other in such a manner that compound index of measuring agricultural development

is calculated by combining agricultural production and inputs variables. While, outputs are the result of best combination of inputs and when indices related to outputs and inputs are combined with each other, indexes are overlapped.

Therefore, we must avoid selecting indexes overlapped with each other because selecting such indexes causes further measurement of a special phenomenon and it may influence the result of calculations (Kalantari,2001). Development economists and sociologists often use different factors and indices in explaining and describing development phenomenon. Usually in development subject, economists pay attention to the quantitative economical rules and sociologists to the social indices. But it should be added that none of these indices can not explain the numerous and complicated aspects of development, singly. Moreover, development is a multidimensional and multilateral matter in economical-social and fundamental structure of a region or country and most of its variables are qualitative that converting them to today's quantitative indices is nearly difficult; but researchers have to use the indices that can indicate the development effects in regions. Nowadays the need of knowing the rate of development that the public have, is felt. Each of theses problems suggests the need of various kinds of different indices for editing them (Shahdadi, 1988).

In the other hand, we should pay attention in selecting development indices in order to not combine positive development indices with negative development indices. In some cases, indices like the number of hospital beds per ten thousand people that is a positive health index are combined with the index of under five years old children mortality rate that is a negative index. While, if the goal is selecting positive indices, negative indices must be avoided or converted to positive indices to provide the possibility of their combination. A simple method for converting such indices is using opposite process (reversing indices).

Explaining some indices must be done carefully. For example, if indices like the ratio of teachers to students are selected as educational indices, explaining such indices may be different from region to region. The number of students in an urban region may be more than teachers because of lack of teachers, while this phenomenon is considered as a reason of undeveloped education. On the other hand, the number of students in a rural region may be less than teachers because of lack of enrolment and education abandonment, while this case also indicates undeveloped education. So, locations and conditions of the region must be considered in explaining indices.

The number of development indices is also a basic subject in studying regional development. If the objective is measuring social-economical development, each of industrial, agricultural, health, educational, fundamental services, etc. sections, must allocate an appropriate

share of the numbers of selected indices to itself. Otherwise, the actual result will not be gained. Suppose that in a study, 20 indices have been selected totally. On the whole, 13 educational, 2 industrial, 2 agricultural, 2 health and 1 fundamental service indices have been selected. In such a combination, the overcome of educational indices to other aspects because of more share, is normal and it will influence on the result of calculations. Therefore, regions with better conditions and facilities of educational indices may be at the head, as more developed regions, though they may be of moderate or even undeveloped regions in other aspects. So, selecting the number of indices in every aspects of the studied subject has a major role in presenting accurate and real result.

When selecting a proportionate index for different sections is impossible and there is too much difference between the numbers of indices in different sections, in order to prevent the overcome of a section to the others, the best way is that first calculate the compound index for different sections separately and second calculate another compound index by using the compound indices of different sections. In this case, each section will have same opinion in the final process and the possibility of the overcome of a section to others will decrease.

What explained above briefly about the development indices show that we should try to avoid the above-mentioned problems in selecting such indices and their explanation; and only select the indices, which have logical relation with development phenomenon. Using so many indices and selecting them aimlessly, may deviate the result of the study and go astray. While by purposeful selecting of limited number of indices we may be able to reach the actual result. For example, per capita income and national income have been accepted by development planners and politicians as a general index. Many people have used per capita income index for determining the development or undevelopment of a region and regions with high per capita income have been considered as developed regions (Taheri, 1997).

Indices can be used for measuring the existing condition or historical process of economical and social changes, policy making, determining the rate of progress, evaluating the exploration of undeveloped regions and measuring regional disparities in different spatial and geographical levels. In this study, more than 90 indices have been regarded as preliminary indices of the research. Naming the indices has been avoided, In order to make the paper brief. After inputting the indices data in computer and doing required corrections by using Morris's discordant index and deprivation coefficient methods, classifying the cities of the province in having rural development indices has been done. For studying the condition of Guilan's cities in having development indices, the most important indices that show the conditions of cities in having environmental, productive, services, fundamental and welfare facilities, have been

used.Necessary information for preparing the above-mentioned indices have been collected and completed from current resources such as the result of statistics, the cultures of villages, reports of urban developments and existing information in Guilan organization of management and planning, prepared reports of executive organizations of the province and statistical yearbook of past years.

After studying the conditions of the cities in having development, endeavors have been done in different indices for finding out the deprivation condition in those fields. In deprivation index, which is generated on the basis of deprivation coefficient, the condition of each city has been shown according to the province's deprivation mean. Deviating from the mean of deprivation index in different fields shows the situation of that city. According to this index, we can simply recognize the cities that are lower than the province's mean. This index helps the politicians in selecting the cities and regions which should give priority in investment and support.

According to the current information, Anzali are higher than the province's mean in total deprivation indices; i.e. they have better conditions. Talesh and Masal are in the lowest classes.

Investment status in level of the province's regions in fourth development plan(Table 1):

One of the basic factors for removing problems and fulfilling capabilities and basic factor of economical development in every country is capital. How the credits are spatially distributed and the governmental investments are spatially examined is one of the objectives that can be accomplished in better recognition and best allocation of credits in different regions and places. Although investment is done for removing deprivation and having facilities and services and in some extents depends on the condition of resources and population settlement, examining the condition of spatial distribution of credits in third development plan in Guilan indicates that more shares of credits are allocated to some regions by any reason.

Particularly, the condition of distributing national credits in the province's regions shows the role of government and regional officials' ideas for directing credits.

Classifying provinces on the basis of their developments and classifying the distribution of governmental credits in different economical and social fields and determining the obstacles existed in equal development of regions is one of the necessities which should be done (Amir Ahmadian, 1999).

An important field in recognizing disparity condition among regions is studying the condition of government's investments during past plans(Table 2). The government always tries to allocate the resources and credits, regarding disparity decrease and providing fields of growth and development in all regions, in the best way.

Table 1: Investment status in level of the province's regions in fourth development plan

percent	Investment in forth development plan (billions Rials)	county
3.8	199070	Astara
3.9	205889	Astaneh
3.1	162027	Amlash
4.3	226125	Anzali
7.3	389030	Talesh
27.2	1440692	Rasht
4.3	230163	Rezvanshahr
6.6	347999.5	Roodbar
6.7	354292	Roodsar
4.0	212156	Seiakal
3.6	188714	Shaft
6.4	337456.3	Somesara
4.6	242036	Foman
5.9	312635.5	Lahijan
4.7	251626.5	Langrood
3.9	204628	Masal
100	5304540	Province

Table 2 : The regional disparity in social – economic indices

Range	Development degree	County
1	0.8263	Anzali
2	0.7342	Roodbar
3	0.7102	Amlash
4	0.7000	Roodsar
5	0.6679	Astaneh
6	0.6521	Rasht
7	0.6515	Lahijan
8	0.6266	Astara
9	0.6123	Masal
10	0.6118	Somesara
11	0.5824	Shaft
12	0.5762	Foman
13	0.5666	Rezvanshahr
14	0.5620	Seiakal
15	0.5321	Langrood
16	0.3878	Talesh

During the third plan, about 53 thousands billions Rials has been allocated in guilan provInce, In the field of national credits, Rasht with 27 percent, Talesh with 7.3 pecent, Roodsar with 6.7 percent have allocated the greatest shares of national credits to themselves. In the field of provincial credits, the greatest share belongs to Rasht. Its share has been 27 percent of provincial credits during the plan. All the above-mentioned cities have been created during the third plan. This condition shows that the distribution of credits has not been balanced during the past years.

In short we can say that distribution of national and provincial credits, either in city level or village level or region level, has been unbalanced and unstable during the third development plan. There is no proportion between per capita credit distribution, the ratio of credit distribution to area and the condition of cities and villages' development and having facilities. It seems that it has not paid any attention to the condition of regions having facilities and balancing policy in distributing governmental credits, so one of the policies of distributing credits in the other plan should be in the direction of decreasing regional unbalancement.

CONCLUSIONS

Generally we should tell that there is disparity between different regions of Guilan province. These spatial and regional disparities originate from many affairs:

Adopting wrong policies by the center for region, budget distribution and facilities of not enough recognition of regions' conditions and states;

Improper classifications of different places and in-coordination of different organizations with each other for giving better services and doing the entrusted duties;

Concentration of the population in some places and emigrant acceptance of developed places which made polarization and decreases facilities;

Worse allocation of resources and credits and wrong regional policy making in this field.

Finally, these in-coordination and difference between different regions demolish the enough unity and cohesion for improving development and strengthen the existing differences and diversities in all development fields and this process in the level of cities, regions and provinces will have certain and unavoidable influences in national levels and even right policies of development will be automatically exposed to negative changes and transformations and will provide barriers for reaching permanent development.

Conditions of spatial distribution of credits and investments are done for removing deprivation and having facilities and services and depend on the condition of settling population and resources to some extents. But studying the condition of credits distribution in the forth development plan in Guilan indicates that some regions could allocate more shares of credits to themselves by any reason. Particularly, the condition of national credits distribution in the level of province's regions shows the role of government and regional officials' ideas well in directing credits.

One of the important fields in recognizing disparity condition among regions is studying the condition of government's investment during past plans. Government always tries to allocate resources such as credits to all regions well by decreasing disparities and providing fields of growth and development. Past functions have not approach this goal.

About economical and social development indices, we can say that:

1.   There are some disparities between different cities in the field of different economical and social indices.
2.   The condition of development and having it between cities is not coordinated. In a manner that some cities have pleasing conditions in the field of economical indices but not in social indices.
3.   Governmental investments which is considered as the most important view of government's policies in developing regions, do not have a balanced condition in different parts of the province specially in more undeveloped parts and this has influenced the increase of regional disparities.
4.   There is a relation between the rate of investment

and the level of developments of the regions. This shows government's investment tendencies in previous plans in the field of removing deprivation. It means that in previous plans, the government intended more to removing deprivation from villages in the indices of having piped water, electricity, health center, school and telephone and paid no much attention to the condition of productive and economical substructures of rural regions. So it can be concluded that policies of distributing governmental credits, which is regarded as the most important policies of the government, have not been so effective in reducing regional disparity. This can weaken national cohesion especially in frontier regions and exogenous approaches.

Recommendations

Increasing the share of some regions in national and regional work division and paying enough attention to spaces having development capability.

Reviewing in land classifications according to the current condition of the regions in order to redefine the new regions of planning.

Regarding to the increasing of cities and sections during past periods, the level of country's classification in some regions has been so small that has caused problems for management. Economical, social and environmental connections in such regions are in an extent that has made the possibility of performing.

Applying special management in Rasht city, because of settling a large portion of the population and provincial activities in it.

Allocating the credits according to the levels of development and having facilities. National and provincial credits are performed in the form of numerous plans and projects annually. In order to best allocating of credits in creating regional balances, necessary actions should be taken in allocating credits after determining the coefficients of having facilities.

Establishing and strengthening proper regional organizations in order to making sections' plans, regional and creating regional functions. This is possible by organizational capacity and making strengthening people's formations.

Zoning review the current state of this region to define new areas of planning criteria;
- Population Index
- Natural homogeneous
- Cultural homogeneity
- Method or style of living
- Spheres of influence of central locations and distance relationships
- Entitlement status
- Special security emergencies
- Balance of Land

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