PATHOLOGY OF REGIONAL DEVELOPMENT MANAGEMENT IN IRAN DURING THE PERIOD 2005 -2015

Kerāmatollāh ZIĀRIL

Department of Geography, University of Tehran, Iran zayyari@ut.ac.ir

Alireza MOHAMMADI

Department of Geography, University of Mohaghegh Ardabili, Iran a.mohammadi@uma.ac.ir

Abstract

In this paper, the management style for regional development in Iran was pathologized. 370 experts were questioned and in order to choose an appropriate style, 30 experts were interviewed through Delphi technique. Statistics methods such as X^2 tests, Spearman correlation coefficient and multi criteria decision methods such as ANP and PROMETEE II were used to giving weight, analyzing, ranking and selecting the appropriate style of management. The research findings indicate that, the majority of experts believe that the management style for regional development in Iran has been completely inefficient during the period 2005-2015, and needs serious reforms. Based on data analyses and use of MCDM and findings, the appropriate management style was selected among various management styles. Finally, "the Network Governance" was proposed as a appropriate style and some recommendation was provided for implementation of this style to regional management in Iran

Keywords: Pathology; regional development; appropriate management style; Iran; decision analysis.

JEL classification:

1. Introduction

In 2000 and during the political and economic reforms, the Plan and Budget Organization which was renamed to Management and Planning Organization of Iran (MPO) unexpectedly was dissolved with the arrival of president Ahmadinejad in 2005 and it was renamed as "Vice- Presidency for Strategic Supervision" and regional management institutions were merged in Provincial General-governor's office [8]. This organization was revived in 2005 by Hasan Ruhani's government but most of researchers believe that the works done during the 2005 to 2014 which were concurrent with Ahmadinejad's presidency made a dark period in policymaking and regional management in Iran which its consequences continued until 2015. Some of the regional policy making characteristics in this period were absence of common understanding of development meaning among institutes, preventing from stakeholders participation, mismatches of the executive, legislative and sectorial system in regional level, undermining the nongovernmental stakeholders, administrative inefficiency, dependence on oil revenues, administrative and financial corruption of public sectors, instability and constant changes in management [24, 28], single-structure Administrative System, lobbying in Legislative Parliament,, lack of inter-institutional and intersectoral cooperation, lack of proper intellectual ground and instability [8]. The continuance of concentrated administrative and political structure, dissociation among the institutions of public sector, private sector and NGOs and lack of a good governance have converted the regions to a fragmental and nonintegrated organism [20]. The institutes' performance have been inefficient and the sectorial perspectives and personal decisions and parallel actions have controlled the regional management [49]. Lack of using the skilled human resources [19, & Abdollahzadeh, 2012), overlap of Institutional and Sectoral Tasks, lack of intersectoral institutions and lack of valid data and information from regions led to weakness of the managing policies [9]. Financial and legal weakness, local institutes' dependence on central government [30], lack of coordination between divisions system of State and regional management system and lack of

Civil Participation, structural, institutional and territorial inadequacies, tough administrative bureaucracy, lack of research and regional development centers or their suspension and fundamental conflict in regional management structure (41, 49), personal administration of regions and being busy with political and sectarian games and their negligence in their regional duties have worsened the conditions of this period. According to the results of Islamic Parliament Research Center (2008), the researches showed that the regional development management in Iran in response to regional demands in this period have been inappropriate. Therefore the pathology of management style of regional development and selecting an appropriate management style or models are necessary for organizing this situation.

This study was aimed to answer three questions: firstly, in terms of utility, what is the situation of the regional development management in Iran during 2005-2015.secondly, what are the characteristics of Appropriate Management style for regional development in Iran? And thirdly, among the common styles, which style is better for regional development?

This paper is consist of eight sections. The first section was introduction. The second section is related to the literature review. The third section is theoretical basis, fourth section is history of regional development management in Iran, the fifth section is the present structure of Regional Development Management, sixth section is methodology and seventh section is findings and discussion and eighth section includes the paper's conclusion.

2. Literature review

During the 2005 to 2015, few researches have been conducted by governmental organizations and academic society about regional development management in Iran which only some of these academic researches are accessible. Sheikhi [42] by discussion about challenges and regional management and executive system in Iran, have concluded that "the regional management system" in Iran is inefficient and incomplete and it is necessary to establish a trihedral (national, regional and sub-regional) regional management. Alemi [2], has concluded that the regional development in Iran is taking a backward step and tends towards the failure and regional institutes do not have enough power. He proposed the decentralization and empowerment of institutes and local organizations. Haj Usefi (2001), in another study has stated that the centralized structure of government, inefficient bureaucracy, domination of sectorial approach, the dependence of regions to the center, inappropriate rules and inapplicable programs are the major obstacles to accomplish the regional development management in Iran. The study and research center of the urbanism and architecture in Iran [34] has indicated the fragmentary of regional planning territories among the institutes and states that the regional management formation is inefficient and their executive structure is not harmonize with planning territories and believes that there is no enough coordination and cooperation between people and regional institutes. This institute has proposed that the decentralization is the main step to reform the present situation. Ministry of Housing and Urban Development [30], concluded that it is necessary to change the approach from comprehensive and traditional approach to strategic approach. Nader Zali and Rasul Zali [47] have concluded that the instability and inefficiency and administrative corruption are among the regional management deficiencies in Iran. Seifoldini and PanahandehKhah (2010) have concluded that the lack of planning, dependence on oil revenues and lack of a good government are reasons for inefficient management system of regional development in Iran.

Zali [46] concluded that the lack of people's participation, lack of common understanding of regional development and contradiction in the regulations are among the main reasons for inefficient regional management in Iran. Soltani [44] believes that the administrative obstacles and inefficient administrative structure are among the main reasons for inefficient regional management. Finally, Kazemyan and Farajirad (2013), indicate that the regional management in Iran has not the characteristics of a "good government". They propose that the regional development policies in Iran must be followed through regional-institutional coordination and integration. At the end, the researches of "Islamic Parliament Research Center" in recent years (2009-2015) have indicated that during the 2014 to 2015, the regional structure in Iran have taken a backward step rather than development.

3. Theoretical bases

Since the 1990s, in most of the democratic countries, the "Regional Governance", is used instead of or equivalent to the regional development management. This term for the first time entered into the global literature from the new institutional economy, new economic sociology, political researches and international relations [14].

Accountability, responsibility, transparency, self-organization, participation, the rule of law, decentralization, strategic landscape, human resources management, efficiency and effectiveness are among the most important characteristics of a good governance [3]. According to Fürst [15], Regional Governance means the institutional network links, coordination of social sub-networks and changing in the approach in dealing with regional issues. Regional Governance meant to reduce the role of governments and its direct and unilateral intervention in managing the regions and regional development plans [23]. Regional Governance is complicated art of leading the institutes [18] for forming and sustaining the influence and power arrangement [21] to deal with regional issues through regional institutes [11] and independent and autonomous networks [37]. Obviously Regional Governance is considered as a structure and process for leadership and coordination at the regional level [6]. Regional Governance can be considered as an interaction between regional development institutes and central governments [1].

According to Böcher [7], the region people will be the major actors in this framework and the regional development will be formed in the context of autonomy along with authority of regional development institutes and their economic and political will. Some of the considerable points in this approach is the Regional coordination, cooperation, regional integration, competitiveness while maintaining the sustainable regional development framework [20]. Finally Benz [6], defines the Regional Governance as a new form of regional policy-making to achieve a sustainable regional development [7]. The Regional Governance characteristics can be summarized as follows: 1- attempting to increase the importance of region as a level of political coordination 2- Territorial principles replacement of functional principle 3- promoting the inter-sectorial partnership through preparedness of networks and small regional partners 4- hierarchical leadership of the competitions through the various motivational tools and models 5- responsibility, self-organization, decentralization and decision-making [7].

According to Dobson (2006), coordination of the regional institutes, making the outlooks for future of the region, comprehension of the relative and competitive advantages of the region, attracting the development actors and investment are the most important characteristics of efficient Regional Governance. - A governance based on the horizontal bonds is flexible, informal, self-guided, based on the local small powers and reliant on the arranging the roles at the levels of local actors [40]. The comprehension of the Regional Governance requires understanding of the networking associations, interests, goals, roles and the future plans of the regional actors [45].

The Regional Governance has no formal and conventional concept in Iran. Therefore the regional management is used as its common concept. During the recent decade, among the five theoretical management style including traditional management, scientific management, strategic management, governance-based management and networking management, practically the traditional and governance-based style s in all periods were dominant in regional management. The governmental institutes have been the major possessors of the resources and absolute actors of regional management in all economic, social and special domains [33].

4. The history of regional development management in Iran

Iran has been among the world's largest producers and exporters of oil and gas until 2015 [12]. Despite the presence of significant resources, the significant lack of intra and inter regional economic_ special balance was among the most important problems of development in Iran [39, 13, 49] and despite the efforts made, the gap between the deprived and developed areas is widened [16]. The first law of regional policymaking and management is The Law of Associations for Provinces and Counties (Literally said in Persian Qānoon-e Anjomanhāye Iyālati va Velāyati) enacted in 1907 [32]. However, Iran officially started policymaking after

the Second World War with the establishment of a centralized quasi-modernist government (Reza Shah Pahlavi). In 1937 the "Supreme Economic Council" was founded with state planning purposes and then in 1948 first plan of development was prepared and "Regional development Policy-making" began as an action made by the higher authorities [39, 36, 49]. During 1948-1979 the government relying on the oil revenues was seeking modernization. continuous economic growth, industrialization and creating the growth poles in the country [39]. Poverty, inter regional imbalance and migration to the cities were among the most important regional challenges in Iran during this period. Until 1979 the necessary institutional framework for regional development policymaking and management was established by founding Plan and Budget Organization (PBO) and the related regional agencies and the sectoral comprehensive plans were developed with the help of foreign consultants [4]. Until 1979, the Plan and Budget Organization (PBO) developed seven national development plans and regional development plans in that framework [39]. Important regional institutions including "Regional Development Agencies" were created the first one of which was "Dashte Moqan Development Organization" founded in 1953 [9]. Before the Islamic revolution regional policymaking and management was usually seeking regionalization of public policies through top to bottom non-participatory process which was usually associated with environment destruction and sectoral approach toward the regions [39]. Regional management was usually faced with serious weakness of regional organizations, inefficient and centralized government structure and lack of experienced manpower [17].

Islamic Revolution of Iran in 1979 that hampered the bureaucracy system, Iraq's imposed war against Iran in 1980 and the subsequent international sanctions against Iran has a negative effect on policymaking system and regional development management. After the war in 1988, regional policymaking in Iran focused on the reconstruction of areas damaged by the war. During the years 1981 to 2005, most of the government that came to power were seeking construction, reforms, social justice, decentralization, eradication of poverty, preventing the rural - urban migration and the realization of the public participation in regional development slogan. In this period three five year development plans have been prepared and implemented in the country. However the areas were still associated with instability of development [39].

5. The present structure of the management of regional development in Iran (2015-2005)

After the 1979 revolution and in accordance with Constitution of the Islamic Republic of Iran adopted in 1980, the political system of Iran is Islamic Republic. The three Legeslative, Executive, and Judicial Powers under the leadership of the Supreme Leader who is elected by the Assembly of Experts, are governing the country. In addition to the Supreme Leader, The Expediency Discernment Council of the System oversees the work of the three powers. Islamic Consultative Assembly is the most important institute that approves national and regional laws. The Constitution of the Islamic Republic of Iran, the five-year National Development Plans, "Iran 1404 Outlook Document" approved in 2003, "the Document of General Policies of the Islamic Republic of Iran" approved in 2003, the Regional and Ultraregional National Documents and Provincial Development Documents approved in 2006 [27] and "Resistance Economy Document" approved in 2014 are among the most important National Executive Documents in the regional management of Iran. At the regional level most government departments make special and regional policies under the supervision of executive power the most important of which is the Ministry of Roads and Urban Development and the Management and Planning Organization of Iran. There are 31 provinces in Iran that form the regional planning and management level. At this level the Provincial governments, in the sub regional level (County) the County Governorship and in districts the district Governorship are considered as the main institutions of regional development. In addition to government agencies, provincial, urban and rural Islamic councils monitor the work of regional institutions. Generally, there are more than 40 organizations and government agencies operate at the regional levels and based on their own ministerial duties [43].

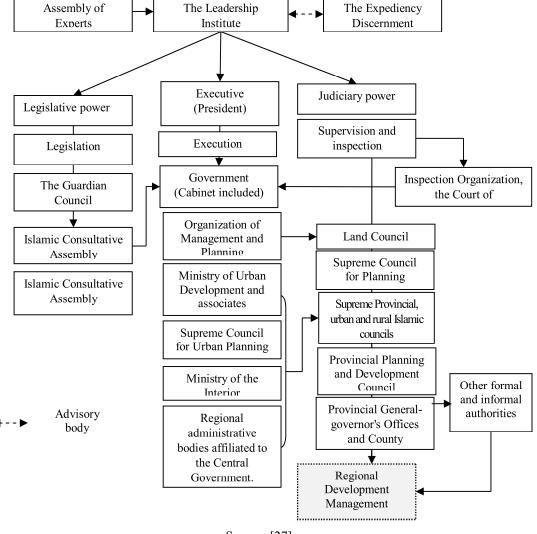


Figure 1: The general structure of regional development management in 2015

Source: [27]

According to the results of Islamic Parliament Research Center, during 2005 to 2015, due to the conflict between the ninth and tenth government's and the countries of the world, Iran's policy and economy was weaker than the previous periods. The economic growth dropped below zero (negative 4.5%). The Gini coefficient increased up to 0.6, the rate of inflation increased from 12% in 2005 to more than 30%. While spending 23 billion dollars of the national income the government debt increased from 3.7 thousand billion dollars in 2005 into 24.7 thousand billion dollars in 2014 [26]. Despite the emphasis of the Fourth Development Plan (2005-2009) on the development of appropriate international economic relations and interactions [27] the inappropriate adventures and government policies during 2005 to 2013 led to the intensification of international sanctions against Iran the consequences of which continued until 2015. With the worldwide decline in oil prices in 2015 a new shock was imposed on the national economy. In this period the most important instruments of regional development are the five year provincial development plans prepared in line with the 5-year national development plans. During this period, the fourth (2005-2009) and fifth developments plans (2011- 2015) at national were approved by Islamic Parliament and conveyed to the government to be executed. At the regional level these plans were prepared by the Regional Management and Planning Organizations and State Planning Council and conveyed to the government institutions to be executed. County Spatial Planning that had been prepared before the revolution since 1966 and have been prepared after the revolution 1983, had been prepared in some provinces by the provincial planning and management organization in the studied period (2005-2014). Then suddenly, in 2007, in a reckless action

the Management and Planning Organization of the country and its provincial offices were liquidated by government [25].

Along with the Provincial Preparation Plans in this period, the Regional Spatial Plans and Province Master Plans have were prepared by the Department of Housing and Urban Development and they are still being prepared. But in 2011 some of the Ministries of the Interior such as "Department of Transportation" and "Housing and Urban Development" were merged without conducting the related studies and preparing these plans faced with difficulties. In this period, provincial trips and subsidized development destabilized intellectual foundations, self-sufficiency and economic independence of the regions and not only the sectoral and spatial development plans were not implemented but also suspended. Although the land planning has been proposed since few decades ago in Iran, after the revolution during the investigated period, with the realization of fourth and fifth national development plans and formation of Land Planning Council in 2004 [25] this Council since the date of formation until 2007 had limited but effective activities. In 2007 with the liquidation of the Management and Planning Organization this Council was also liquidated. Although in 2011 the Regional Planning Office was formed in Vice President's Strategic Supervision, it never had a chance to dominate the situation until 2015 (Ibid).

According to the results of MRC [25, 26, 27] during 2005-2014 a series of actions and weaknesses of the ninth and tenth governments led to inefficient management in regional development of Iran. According to the state nature of regional management, the regional management structure has been associated with stagnation and backwardness in recent years. This has accelerated the regional development instability and despite the efforts made by the new government in 2015 for the renovation and modification of regional management, structural obstacles still remain.

6. Methodology

This study was based on the referential and questionnaire methods. In the first step with the reference to articles, books and reports available, the theoretical literature, history and a long list of research variables were extracted. The variables were categorized into five main aspects. The five categories are:

Theoretical approach and bases: sustainable development, approach, theoretical foundations, coordination, policy, future study.

Institutional structure and decision-making: the reform of the existing style, decentralization, preparation and approval of plans, content and tools, plan execution, supervision, monitoring system, participation in the development, administrative structure.

Efficiency and performance: capacity building and empowerment, administrative structure, leadership, stability, financial planning, sustainable development, innovation and creativity, new methods and tools, operational objectives, exceptionability and flexibility, accurate data, quality orientation, improving resource management.

Good governance: accountability, responsiveness, rule orientation, justice orientation, private sector and NGO (non-governmental organizations) partnership, efficiency and effectiveness, participation reception, transparency.

The appropriate management style: accountability, responsiveness, rule orientation, justice orientation, private sector and NGO (non-governmental organizations) partnership in management, integration oriented, participation reception, strategy oriented and prospective, Realistic, program oriented, stable, information oriented, knowledge oriented, accountable and the responsive, law oriented, efficient, effective, exceptionable, controllable, dynamic, justice oriented.

In the second step the researcher made electronic questionnaire with 5 point Likert scale was prepared. In the third step, in order to assess the internal validity of the instrument the qualitative and quantitative methods were used. The questionnaires have been distributed among a number of experts and university professors and their comments were applied on the final version. To assess the quantitative validity of research tool the questionnaire was sent to 30 experts in the field of regional development studies (geography, urban planning, social sciences, management, economics and other related fields). Then using the content validity ratio or CVR [22] the quantitative validity of the research tool was assessed (equation 1).

Equation 1: CVR =
$$\frac{n_{E-\frac{N}{2}}}{\frac{N}{2}}$$

In this equation ne equals the number of experts that among the alternatives "bad", "poor", "good", "very good" or "excellent" chose the last three alternatives. N is the total number of experts. The value of CVR is variable between +1 and -1. The value of the coefficient was calculated as 0.46 which was evaluated as "essential" according to the positive value of the coefficient. In the fourth step, the population was classified into 4 groups including: 1) decision-makers (public and state sector), 2) academic and scientific and research institutions (public and private sector), 3) counseling and preparation of plans centers (private sector), 4) institutions and regional executives (state sector). Then the data related to these groups was collected using statistical and organizational data through visiting their websites (universities, research centers, consulting firms, provincial governments, etc.). Using multistage cluster sampling the population size was determined as 6700 subjects. Then using Cochran equation (equation 2) the sample size was determined.

Equation 2:
$$n = \left(\frac{NZ^2 pq}{Nd^2 + Z^2 pq}\right)$$

Where: N= sample size, Z= the value of normal variable of standard unit that at 95 percent level of confidence equals 1.96, p= the value of the attribute in the community, q= the percentage of people who lack that attribute in the population.

Equation 3:
$$n = \left(\frac{6700(1.96^2)(0.5 \times 0.5)}{6700(0.05^2) + (1.96^2)(0.5 \times 0.5)}\right) 100 \approx 363 = 370$$

Then the electronic questionnaires were sent to the samples to be filled using the random sampling method. 157 and 183 responses were received on the first and second round respectively. On the third round in order to compensate the lack of or incomplete responses, again a number of questionnaires were sent to the new samples from the same cluster and 30 correct responses were added to the answers. In the fifth step the Cronbach alpha (equation 4) and Gutman methods were used to assess the reliability of the instrument.

Equation 4:
$$\alpha = \frac{k}{k-1} \left[1 - \frac{\sum_{i=1}^{k} \sigma_{Yi}^2}{\sigma_x^2} \right]$$

K equals the number of questions, σ_{vi}^2 is the variance of the sub-test K, σ_{vi}^2 is the test variance. Cronbach's alpha coefficient was obtained as 0.814 that indicates the validity of the instrument. In order to test the normality of the data the Kolmogorov –Sminoroff test at 0.05 significant level was used and the result of the test indicated that the level of sig was smaller than 0.05 and the variables were not distributed normally. In the sixth step using the Delphi method a researcher made form as 9 point Thomas L. Saaty scale was sent to 30 elites to conduct the pair wise comparison of the main research components and weight the criteria the results of which were used in Super Decision Software. In step seven the collected data were analyzed in SPSS to extract the descriptive and inferential statistics. In step eight using data analysis in Super Decision, Visual PROMETHEE and the MCDAM Engine software the experts' opinion (370 samples) and 30 elites were used to rank the possible alternatives to determine the most appropriate regional development management style. One of the main problems of this study was the lack of statistics and classified data from the regions and timely responses to the electronics questionnaire.

ANP Method

One of the most widely used methods of weighting and ranking is the ANP or Analytical Network Process designed by Tomas Saaty in 1996. In this study ANP is used as the most complete and desirable method of multi-criteria decision making method. In ANP the relationship between the criteria, sub-criteria, alternatives and the clusters is multi dimensional network. The ANP algorithm is based on the following steps: (1) Determining the subject and choosing the possible alternatives (2) Forming the network structure, clusters and related elements (3) Defining the internal and external dependencies of the clusters, criteria and elements (4) Conducting the pair wise comparisons and calculating the weighted

vector of comparison (5) Forming the initial weighted and non-weighted super matrix and the limit supermatrix. (6) Performing the ranking calculations and choosing the top alternative using Lane et al. equation to choose the top alternative [48]:

Equation 5:
$$Di = \sum_{J=1}^{j} W_{j} \times E_{jj}$$

In this study since the Promethee is the basis of selection, ANP is used to determine the weight of criteria [37, 38].

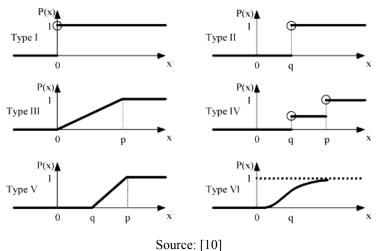
PROMETHEE II method

This method is one of the methods of MCDM designed by two Belgian professors Jean Pierre Brans and Bertrand Mareschal in the 1980s that using limited qualitative and quantitative criteria evaluates and ranks the alternatives [5].

If we assume A is the set of the alternatives among which we have to choose, assuming K effective criteria in decision making, for each item $A \in a$, the (a)fj value indicates the value of j-th criterion in alternative a. The ranking is done in three steps:

First step: The criteria are determined and the preference function Pj is allocated to each one of the j criteria. The Pj (a,b) value is calculated for each pair. This value varies between zero and 1. If the relationship fj (a) = fj (b) applies, Pj (a, b) equals zero and as fj (a)-fj (b) increases this value is increased as well and when the difference is large enough, the value of Pj (a, b) approaches 1. Various shapes can be assumed for function Pj that depend on the modeling of j-th criterion. PROMETHEE method proposes six generalized criteria for preference function to the decision maker than include: 1- A normal function, 2- U function, 3- V function, 4- Interchange function, 5- V functions with neutral zone, 6- Gaussian functions. However, for each criterion fj, one weighting factor i.e. wj is considered as well. Figure 2 presents the preference functions. (See Figure 2)

Figure 2: Preference functions (generalized criteria)



Second step: The amount of preference for each alternative a is calculated on alternative b. The greater the value of π (a, b) is more preferable alternative a will be. π (a, b) is calculated as follows:

Equation 6:
$$\pi(a,b) = \sum_{j=1}^{k} wjpj(a,b), (\sum_{j=1}^{k} wj = 1)$$

 π (a, b) indicates the degree of priority of alternative a over the alternative b.

Third step: The general preference of alternative a over other alternatives and the output flow is calculated as:

$$\frac{1}{n-1} \sum_{x \in A} \pi(a, x)$$

(a) = Positive ranking flow or the output flow

This flow indicates the priority of alternative a over other alternatives. This flow is in fact the a alternative power. The greatest Φ +(a) is the best alternative. The preference of other alternatives over alternative a, which is called the input flow in calculated as:

$$\varphi - (= \frac{1}{n-1} \sum_{x \in A} \pi(x, a)$$

(a)= Negative ranking flow or the input flow

This flow denotes the extent of other alternatives have priority over the alternative a. This flow is in fact the weakness of alternative a. The smallest φ - (a) denotes the best alternative. Therefore by obtaining and separate analysis of the flows φ + and φ - it is possible to conduct a partial ranking (IPROMETHEE ranking). For the complete ranking of the alternatives the net flow (final) ranking must be defined for each alternative (IIPROMETHEE ranking):

Equation 9:
$$\varphi(a) = \varphi(a) - \varphi(a)$$

This flow is the result of the balance of positive and negative ratings. The higher net flow denotes the preferred alternative [5]. (See Figure 3)

Figure 3: The process of implementing the model PROMETEEII

Step 1. Determination of deviations based on pair-wise comparisons

$$d_{j}(a,b) = g_{j}(a) - g_{j}(b)$$
 (1)

Where $d_i(a,b)$ denotes the difference between the evaluations of a and b on each criterion.

Step 2: Application of the preference function

$$P_j(a,b)=F_j[d_j(a,b)]$$
 $j=1,...,k$ (2)

Where $P_i(a,b)$ denotes the preference of alternative a with regard to alternative b on each criterion, as a function of $d_j(a,b)$.

Step 3: Calculation of an overall or global preference index
$$\forall a,b \in A \ , \qquad \pi(a,b) = \sum_{j=1}^k P_j(a,b) w_j \eqno(3)$$

Where $\pi(a,b)$ of a over b (from 0 to 1) is defined as the weighted sum p(a,b) of for each criterion, and w_j is the weight associated with /th criterion.

Step 4: Calculation of outranking flows/ The PROMETHEE I partial ranking
$$\phi^{+}(a) = \frac{1}{n-1} \sum_{x \in A} \pi(a, x) \qquad (4) \qquad \text{and} \qquad \phi^{-}(a) = \frac{1}{n-1} \sum_{x \in A} \pi(x, a) \qquad (5)$$

Where $\phi^+(a)$ and $\phi^-(a)$ denote the positive outranking flow and negative outranking flow for each alternative, respectively.

Step 5: Calculation of net outranking flow/ The PROMETHEE II complete ranking

$$\phi(a) = \phi^{+}(a) - \phi^{-}(a)$$
 (6)

Where $\phi(a)$ denotes the net outranking flow for each alternative.

Source: [5]

Among of the main advantages of PROMETHEE II are simplicity, clarity and reliability [31]. The reason for choosing this method is the possibility to use it when we are dealt with the elites that care about the time of participating in the poll. The second reason is its ease of use for ranking using Visual Promethee software.

7. Findings and discussion

The regional development approach

According to most researchers, the management structure of regional development in Iran is based on sectoral planning [39, 49]. On the other hand, spatial planning is distributed among distinct entities that do not follow an integrated program [39, 20] and the blueprint approach governs it. The results of X² test for the component variables "regional development approach" show that lack of attention to sustainable development obtains the number

160.935, the need to move from the comprehensive approach to strategic approach obtains number 354.649, the change of theoretical foundations of regional management obtains 221.876 value, consistency obtains 0.692 value, the need for change policy obtains the value 131.486 and future study obtains 1.557. Since the level of significance of X^2 test is 0.001 in most variables which is less than 0.05 and the value of X^2 test for all variables is 169.854 at the level of significance of 0.001 and 95% confidence level, the existing management style is in adverse condition based on approach and it needs to be modified.

The regional management institutional and executive structure

The results of X^2 test for every single variable indicate that, the need to modify the existing style with the value of 32.701, decentralization with the value of 288.972, preparation and approval of plans with the value of 289.935, revision of the plans' content with the value of 327.670, attention to the implementation of the plans with the value of 135.611, the necessity to revise supervising the plans' implementation with the value of 407.665, the necessity to revise monitoring system with the value of 358.483 provide the need to participate in the development with the value of 73.178. Also the X^2 value for the sum of indicators presents the value 384.265 that with the level of significance of 0.001which is smaller than 0.05 at 95% confidence level denote that the regional development administrative and institutional structure in Iran is in poor conditions.

The efficiency and effectiveness of the regional management administrative structure

Another component that challenges regional management system in Iran is the efficiency and effectiveness.

The results of X² test for every single variable of this component indicate that, the need to change the administrative structure obtained the value of 175.449, making the capacity and empowerment obtained the value of 103.789, appropriate organizational leadership obtained the value of 37.632, administrative stability obtained the value of 334.714, specialty orientation obtained the value of 299.503, financial planning obtained the value of 131.438, sustainable development in organizational structure obtained the value of 186.2, innovation and creativity obtained the value of 461.270, use of the new managerial methods obtained the value of 159.476, having operational objectives obtained the value of 154. 157, exceptionability and flexibility obtained the value of 40.227, using efficient data obtained the value of 158.957, paying attention to quality orientation obtained the value of 205.692 and improving resource management obtained the value of171.670. Also the X² value for the sum of indicators presents the value 318.378 hat with the level of significance of 0.001which is smaller than 0.05 at 95% confidence level denote that the administrative and institutional structure of regional development management in Iran is in poor conditions.

Good governance

According to the centralized decision –making structure in Iran, good governance is one of the challenges of regional development management system in Iran. The results of X² test indicate that the lack of attention to the participation of people in regions obtained the value of 328.027, transparency obtained the value of 106.643, responsibility obtained the value of 48.530, efficient response obtained the value of 293.459, attention to the law obtained the value of 155.259, attention to the justice obtained the value of 140, attention to the partnership of private and public institutions obtained the value of 252.362, and intra organizational efficiency and performance obtained the value of 147.989. Also the X² value for the sum of indicators presents the value 130.449 with the level of significance of 0.001 which is smaller than 0.05 at 95% confidence level denote that the administrative and institutional structure of regional development management in Iran is in poor conditions in terms of good governance components. Moreover, the correlation test result between the components "the need to modify the existing style" and "good governance" obtained the value of 0.347 with the level of significance of 0.001. This means that the experts who believe to modify the existing style are in favor of the fact that the existing style lacks the characteristics of good governance.

The appropriate style for management

The results of X² test indicate that the index of being regional obtained the value of 515.838, exceptionability obtained the value of 363.362, participation reception obtained the value of 193.578, integrated approach obtained the value of 570.622, strategic orientation obtained the value of 198.168, realism obtained the value of 307.627, program orientation obtained the value of 287, stability obtained the value of 68.032, information orientation obtained the value of 210.881, knowledge orientation obtained the value of 168.38, accountability and the responsiveness obtained the value of 131.486, law orientation obtained the value of 156.362, efficiency obtained the value of 183.476, effectiveness obtained the value of 201.768, exceptionability obtained the value of 92. 119, being controllable obtained the value of 153.476, dynamicity obtained the value of 198.584 and justice orientation obtained the value of 215.989. Also the X² value for the sum of indicators presents the value159.395 with the level of significance of 0.001which is smaller than 0.05 at 95% confidence level denote that the appropriate style of management is in accordance with good governance indices. With regard to the abnormal distribution of the variables the nonparametric Spearman correlation test was used to test the correlation between the need to "revise the existing style of management" and the "appropriate style of management". The test statistic was calculated as 0.583 (Table 1) which indicate that there is a strong and significant correlation between these two conditions. It means that the participants who believe to modify the existing style are in favor of the model that has the characteristics of good governance. (See Table 1)

Table 1. Correlation Between existing condition and proposed management style

Variable	Correlation	Significance level	
The need to modify the existing condition	0.583	< 0.001	
The proposed management style	. 0.000		

Source: Authors

In addition, the X^2 test result indicates that among the different patterns of management, management styles based on the participation have higher priority to create an appropriate system of regional management (Table 2). Also the X^2 test result indicates that among the different patterns of management, management styles based on the participation have higher priority to create an appropriate system of regional management (Table 2).

Table 2: The results of the Chi squared test to analyze various management styles

Item	The observed value	Expected value	The remaining	Chi squared value	Degree of freedom	Significance level
Other	10	92.50	-82.50			
The traditional model of management	146	92.50	53.50	-		
The modern management style	35	92.50	-57.50	22115 7	3	< 0.001
The collaborative management style	179	92.50	86.50	-		
Total	370		A(1	-		

Source: Authors

Proper management realms

Considering that in the existing condition there is a hierarchical relationship ruling on the strong central management system in Iran, most experts and elites believe that management levels must obey the national, regional, sub- regional and local model. In addition, there is a belief that the existing centralized system is in appropriate and the regional levels are not appropriate on their own for management development. Rather, an appropriate style should obey a hierarchical integrated system with balanced distribution of power between national, regional and local institutions (See Table 3).

Table 3: Frequency distribution of management levels based on the responsive authorities

Levels of management	Frequency	Frequency	Cumulative	
Levels of management	rrequency	percentage	percentage	
Government oriented	33	8.92	11.89	
At both national and regional level	114	30.81	42.70	
At national, regional and district, local				
level	202	54.59	97.30	
Entirely at regional level	10	2.70	100	
Other	11	2.97	2.97	
Total	370	100		

Source: Authors

In the present situation, the national level is very strong and local level is very weak. With the existence of political and administrative institutions and councils of the planning and development of the province, in the present regional management structure, citizens and local communities are on the margins of decision —making. The government is forefront of policy—making in the regions. The communities are widely dependent on the governmental resources and actions at regional levels. The strong dependence of the Iran's economy on oil has led to the severe reliance of small communities and local associations at regional level.

Selecting the appropriate management style

In this section in the first step based on the pair wise comparison made by 30 elites, the final weights of 4 main criteria were calculated using the ANP method in Super Decision software. The governance criterion obtained the weight of 0.51, efficiency and effectiveness criterion obtained the weight of 0.37, the approach and methodology obtained the weight of 0.08 and decision making and execution obtained the weight of 0.04. In the appropriate mode the adaptation rate in ANP method was calculated as 0.09 which is smaller than 0.1; hence the pair wise comparison at 99 % confidence interval is appropriate to execute PROMETHEE model. Then, regarding that PROPETHEE II method is based on criteria rather than sub criteria, the elites were asked to score their optimal management alternative based on the criteria mentioned in the study and through pair wise comparison. The frequency of the obtained data from the selection of elites became the quantitative foundation being used in PROMETHEE II method.

In the second step, the direction and evaluation units of criteria were specified in Visual PROMETHEE. All the criteria were in the positive criteria category. This means that the difference between the values of comparison of alternatives affect the priority of priority of the alternatives if it is higher than 5. Below the weight obtained from ANP are considered in the model. With regard to the quantitative data, the indifference limit (q) and priority limit (p) was selected among 6 functions of third kind function (V Shape). In the third step the values scored by the elites were applied to the models to specify the priority of the alternatives in PROMETHEE model. Then the P value or the priorities of the alternatives (models) were calculated towards each other. (See Table 4)

Table 4 the initial matrix of criteria based on the percentage of the votes of 30 elites

		Criteria			
		Approach and Methodology	Decision - making and execution	Efficiency and effectiveness	Good Governance
A	NP weight	0.08	0.04	0.37	0.51
ь	1. Traditional	0	7	0	0
Mana	2. modern	7	21	17	0
1gen	3. Strategic	40	24	21	20
nent	Governance	27	28	30	400
Management styles	Network	26	20	32	36
S	Total	100	100	100	100

Source: Results of the study. Based on the elites questionnaire, 2014

In the fourth step after involving the weights and specification of the functions, the positive (Ph +) negative flow (-Ph) and final ranking of the alternatives was conducted using PROPETHEE II. (See Table 5).

Table 5: ranked net flow of alternatives

Rank	Management style	+Phi	Phi-	Phi
1	Governance model	0.8682	0.0576	0,8106
2	Network model	0,7470	0,1707	0,5763
3	Strategic model	0,5258	0,4475	0,0783
4	Modern model	0,1258	0,7172	-0,5914
5	Traditional model	0,0000	0,8737	-0,8737

Source: Results of the study calculated on Visual PROMETHEE

The processing of the data entered to Visual Promethee by PROMETHEE II and calculating the ranked net flow (Table 5) resulted in the fact that the governance, network and strategic models are the three prior models respectively which are closely related in terms of the decision making criteria and have the highest priority. To ensure the accuracy of calculations in Promethee the obtained result was compared with the opinions of 370 samples. The result was that the governance-based management style with the frequency of 40%, the network-based management style with the frequency of 34% and strategy-based management style with the frequency of 24% were the proposed models of the respondents and the comply with the final model of PROMETEEHE. The final output of PROMETHEE II ranking using the "Promethee ranking network" diagram in GAIA modeling of Visual PROMETHEE software is displayed graphically (As in Figure 4).

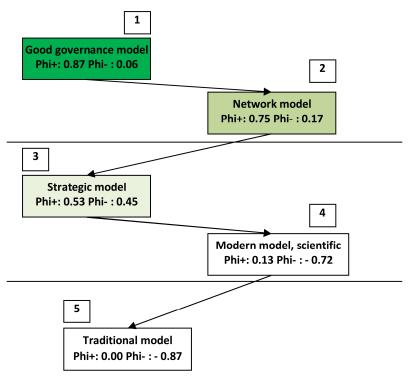


Figure 4: Final ranking network of the alternatives (PROMETHEE Ranking Network)

Source: Results of the study

To understand which criteria had the determining role in ranking the models, the Action Profile Tool in GAIA was used. The results showed that in the governance model, the governance and decision making criterion, in network management style, the efficiency and effectiveness criterion and in strategic management style, the attitude and approach criterion had prominent roles. It was found that the traditional and modern management styles that are still common in Iran and the public sector cannot be considered as appropriate styles to improve the regional development management. Since each selected model have some advantages by combining the capabilities of the top three models it is possible to achieve an integrated model which can be known as the management style based on network governance. In this model the attitude strategy, good governance, efficiency and effectiveness are focused. According to the documents related to 21 United Nations Agenda network governance besides the geographical area has something to do with social, economic and political networks [29].

Results of the study confirm the ideas of Alemi [2], Haj Yousefi (2001) and the Center for the Study and Research of Urban Planning and Architecture in Iran [34] about the inefficiency of existing style of regional development management in Iran. Despite the formation of regional institutions there is still resistance against decentralization from national level and in the formal system of development management the local communities particularly those in rural areas do not contribute to the development. Also due to the domination of sectoral attitude in the administrative structure and the domination of physical attitude in administrative tools, the findings of Ministry of Roads and Urban Development [30] and Haj Yousefi (2001) about moving from the comprehensive to strategic approach and sectoral to physical approach are confirmed. Also, according to the findings of this study and confirming the fact that the regional management and development system in Iran is constantly changing due to lack of management stability, the opinions and findings of Nader Zali and Rasoul Zali [47] and Soltani [44] based on the fact that the existing style of regional development management in Iran is unstable and inefficient, are approved. Also, the since in the present study we obtained the good governance model as the appropriate management style, the findings of Seifoddini et al. (2010) and Kazemian and Faraji Rad [20] based on the need to establish an acceptable regional governance model are confirmed. Also the findings of this research confirm the results of Majlis research center during the recent years (2009 to 2015) and the rollback and stagnation of regional development management during 2005-2015 are confirmed for several reasons.

8. Conclusion

This study has some important results. First of all, the existing regional development management style in Iran during 2005-2015 has an inefficient structure that follows the traditional, bureaucrat and sectoral programming system. In terms of organizational and administrative structure the existing style lacks the necessary efficiency and effectiveness. Also it lacks the characteristics of a good governance model in which the public participation has no place. The results show that it is necessary for the existing style to be modifies into three levels of national, regional and sub-regional with a powerful national center. Such changes demand the decentralization of decision -making system in favor of the regions at these tree levels and in the regional management the participatory approaches implementation at the sub regional and local levels. Since each of the governance, strategic and network models have some unique advantages, by the integration of these models we obtain the "Network Governance" model as the appropriate management style. This model can integrate the regional actions at three levels. The execution of this model requires the empowerment of regional institutions, the development of the network society, the modification of theoretical bases of regional management, the promotion of efficiency and effectiveness of regional institutions, contribution to establish regional governance and facilitation of the participation of local communities and NGOs in the development. Also modifying the role of Planning and Development Council of Provinces to the regional parliament could be an important step in the decentralization from the national level.

Resources:

- [1] Albrechts, L., Healey, P. and Kunzmann, K., Strategic spatial planning and regional governance in Europe. Journal of the American Planning Association 69, (2), 2003, 113-129.
- [2] Alemi, M., Regional Development Management in Iran; East Corridor Development Experience. Urban Management, vol 1, N 6, 2001, 44-53.]In Persian [.
- [3] Angeles, Leonora., Democratizing Regional Governance: Constraints and Opportunities for Brazilian and Other Metropolitan Regions in Latin America. Prepared for delivery at the 2009 Congress of the Latin American Studies Association, Rio de Janeiro, Brazil, June 11-14, 2009.
- [4] Asayesh, H., Fundamentals and Methods of Regional Planning. (7th Edition), Tehran: Payame Noor University Publications, 2007, [In Persian].
- [5] Behzadian, M., Kazemzadeh, R.B., Albadvi, A. and Aghdasi, M., PROMETHEE: A comprehensive literature review on methodologies and applications. European Journal of Operational Research, vol. 200, issue 1, 2010, 198-215.
- [6] Benz, A., Regional Governance. Fernuniversität Hagen, Fachbereich Kultur- und Sozialwissenschaften, Polis, 2003.
- [7] Böcher, M., The concept of Regional Governance in different national funding programmes. 2005, www.regionenaktiv.de/bilder/paper_boecher_hagen.pdf. Accecced on 2014-10-05.
- [8] Boluorian, A. A., Spatial Planning. Tehran: Rasa Cultural Service Publications, 2010, [In Persian].
- [9] Dalir, H. K., Regional Planning. (12th Edition), Tehran: SAMT, 2014, [In Persian].
- [10] Dias, L.C., Costa, J.P., Climaco, J.N., A parallel implementation of the PROMETHEE method. European Journal of Operational Research 104 (3), 1998, 521–531.

- [11] Dimento, J.; Graymer, L. LULU, Governance, and Regionalism: The themes of the Volume. In: Dimento, J.; Graymer, L., Confronting regional challenges: approaches to LULUs, growth, and other vexing governance problem, 1991.
- [12] Esfahani, H. S., Mohaddes, Kamiar. Pesaran, M. H., Oil exports and the Iranian economy. The Quarterly Review of Economics and Finance, Vol. 53, Issue 3, 1999, 221-237.
- [13] Eshkevari, H. M., Principles and Basis of Regional Planning. Tehran: Payam Publications, 2007, [In Persian].
- [14] Federwisch, Tobias., The Politics of Spatial Identity: Regional Governance and the Strategic Constitution of Regional Identity. Nordia Geographical Publications 36: 4, 2007, 47–60.
- [15] Fürst, D., Regional Governance. Information Zur Raumentwicklung, Vol. 8(9), 2003. 441-450.
- [16] Ghanbari, A., Analysis of Regional Disparities in Iran, 2014, [In Persian].
- [17] Hajyoosefi, A., Regional Planning in Iran, from the Beginning to 1350s., Modiriyat Shahri, Vol.2, No.6, 6-17, 2001, [In Persian].
- [18] Jessop, B., Globalization and the National State. Department of Sociology, Lancaster University, 1997, from: http://www.comp.lancs.ac.uk/sociology/papers/Jessop-Globalization-and-the-National-State.pdf
- [19] Kalantari, K., & Abdollahzadeh, G., Spatial and Land Use Planning. Tehran: Tarho Manzar Publications, 2012, [In Persian].
- [20] Kazemian, G. Farajirad, K., Local and Regional Development, an institutional Perspective. Tehran: Jahad-e- daneshgahi Organization Publications, 2013, [In Persian].
- [21] Kötter, R., Ecological Modernization and Regional Governance What compatibility of two fields of theory, policy discourse and practice? In: Fürst, D.; Knieling, J. (eds.): Regional Governance. New Modes of Self-Government in the European Community, Euro Conference 19.-21. April 2001. Hannover, ARL, 2002.
- [22] Lawshe, C.H. A Quantitative Approach to Content Validity. Personnel Psychology, 28, 1975, 563–575.
- [23] Mac Leod, G. & M. Goodwin., Space, scale and state strategy: rethinking urban and regional governance. Progress in Human Geography, vol. 23, 1999, 503-527.
- [24] Majlis Research Center [MRC], Pathology Of Development Programs In Iran. Office Of Plan And Budget. Tehran: IPRC Publications, 2009, [In Persian].
- [25] Majlis Research Center [MRC], Reviewing of Spatial Planning Preparation in Iran. Office of Plan and Budget. Tehran: IPRC Publications, 2013, [In Persian].
- [26] Majlis Research Center [MRC], Check the status of some macroeconomic variables. Office of Economic Studies. Tehran: IPRC Publications, (2014a), [In Persian].
- [27] Majlis Research Center [MRC], Evaluation of program Systems in Iran. Office of Plan and Budget. Tehran: IPRC Publications, (2014b), [In Persian].
- [28] Majlis Research Center [MRC], Meta-analysis of regional disparities in Iran. Tehran: IPRC Publications, (2015), [In Persian].
- [29] Meyer, W., Elbe, S., Evaluation of Regional Network Governance. Capacity Building for Steering Sustainable Development. Published in: George, C., Kirkpatrick, C. H., (eds). Impact Assessment and Sustainable Development: European Practice and Experience edited. Vol 2, 2006.
- [30] Ministry of Housing and Urban Planning [MHUP), Reform of the Urban Development Management in Iran Based on A Strategic Approach. Tehran: MHUP publications, 2008, [In Persian].

- [31] Momeni, M. Sharifi, A.S., MCDM Models and Softwares. Tehran: Author, 2013, [In Persian].
- [32] Nozarpour, A., Regional Management Laws. Modiriyat Shahri, Vol.2, No.6, 2001, 4-5, [In Persian].
- [33] Rahnamaei, M. Vothooghi, S., Analysis of regional development from the perspective of political economy. Geography Journal, Vol.11. No.39. 2014, 33-51. [In Persian].
- [34] Research Centre of Urban Planning and Architecture, Report of the Seminar on Development and Regional Balance. Institute of Higher Education and Public Management Research, Tehran, 2002.
- [35] Rhodes, R.A.W., Understanding Governance: Policy Networks, Governance, Reflexivity and Accountability, Open University Press, Buckinham, 1997.
- [36] Richardson, H.R., Regional Planning in Iran. (Electronic Version), Growth and Change, 6 (3), 1975, 16 –19.
- [37] Saaty, T. L. & Brady, C., the Encyclicon, Volume 2: A Dictionary of Complex Decisions using the Analytic Network Process. Pittsburgh, Pennsylvania: RWS Publications, 2009.
- [38] Saaty, T.L., The Fundamentals of Analytic Network Process. Proceeding ISHP 1999, Kobe, Japan, August 1999, 48-63
- [39] Sarrafi, M. (1998) The Fundamentals of Regional Development Planning. Tehran: Plan and Budget Organization Publications, [In Persian].
- [40] Savitch, H.V.; Vogel, R. K., Paths to New Regionalism. In: State and Local Government Review, 32/3, 2000, 158-168.
- [41] Seifolddini, F., Pazhohan, M., Limits and Challenges of Regional Development Planning in Iran. Geographic Studies, Vol 42, N 73, 2010, 83-98.
- [42] Shekhi, M., Regional Planning in Iran (1360-1380); nesessities, Trends and Challenges. Modiriyat Shahri, Vol.2, No.6, 4-5, 2001, [In Persian].
- [43] Social and Cultural Affairs Tehran Municipality [SCATM] (2014) Urban Management in Iran. Tehran: Tisa Publications, [In Persian].
- [44] Soltani, N., Evaluation Land Use Planning Projects Face Obstacles in Iran Integrate Approach. The journal of Spatial Planning. Vol. 17, No.3, 2013, 63-84.
- [45] Voogd, Henk., Rethinking Regional Governance and Planning. In: Role Of The Regions In The Enlarging European Union, Centre For Regional Studies, 2001, 194-213.
- [46] Zali, N., Planning Pathology in Iran Based on Mission-centrism in Regional Development Policy–Making. Regional Planning Journal, Vol. No. 6. 2012, 81-89, [In Persian].
- [47] Zali, N., Zali, R., Stability of Tenure of Regional Development Managers during 1979-2005 Case Study: Senior Managers of East Azabaijan Province. Vol. 3, No. 23, 2010, 83-108,]In Persian[.
- [48] Zebardast, http://jfaup.ut.ac.ir/?_action=article&au=128231&_au=Esfandiar++ZebardastE., The Application of Analytic Network Process (ANP) in Urban and Regional Planning. Honar-ha-Ye- Ziba, Volume 2, Issue 41, spring, 2011, 79-90.