



Analysis of Factors Affecting the Inefficiency of Spatial Policies in Rural Areas of Iran

Hedayat Darvishi*¹- Abdolreza Rokneddin Eftekhari²- Bijan Rahmani³- Mozafar Sarrafi⁴- Mohammad Atashak⁵

1- Ph.D. Candidate in Geography and Rural Planning, Shahid Beheshti University, Tehran, Iran

2- Full Prof. in Geography and Rural Planning, Tarbiat Modares University, Tehran, Iran.

3- Associate Prof. in Geography and Rural Planning, Shahid Beheshti University, Tehran, Iran

4- Associate Prof. in Regional Planning, Shahid Beheshti University, Tehran, Iran.

5- Ph.D., in Geography and Rural Planning, Tehran South Branch, Islamic Azad University, Tehran, Iran

Received: 6 June 2018

Accepted: 1 March 2019

Abstract

Purpose- The inefficiency of rural development policy as a multidimensional phenomenon is due to various factors and causes. It has adverse outcomes in rural areas and in different dimensions of the territorial (spatial), organizational and intersectoral activities. Since the present study has practical purposes, the analysis of the effective factors, and analysis of the effects of each factor in the process of inefficiency of rural spatial policies in rural areas are considered.

Design/Methodology/Approach- The strategic question is: "What are the factors affecting the ineffectiveness of the planning policy for rural development in Iran?" To answer the question, an analytical methodology based on Delphi tool and interpretive structural modeling have been used. In this regard, a library method (research background) and questionnaires and interviews (experts' opinions of the National Planning and Budget Organization, and the Provincial Management and Planning Organization- 20 people) were used to collect information. Factors contributing to the inefficiency of planning policy for rural development in Iran were determined. In the next step, using Interpretative Structural Modeling (ISM), the relationships between the factors affecting the ineffectiveness of the planning policy for rural development in Iran were specified and analyzed in a unified manner. Finally, using the MICMAC analysis, the types of variables are clustered according to the reciprocal influence on other variables.

Findings- The results show that the factors of over-dependence on oil revenues, unstable rural development policy and centralized policy-making system, planning and decision making with the driving power of 16 have had the greatest influence and acts like the base of the model. In order to start and reform the structure of the rural development policy system in the country, it should be emphasized first. The factor of diversity, plurality, dispersion and underdevelopment of rural settlements with the driving power of 1 has the least influence.

Key words: Rural development, spatial planning policy system, interpretive-structural modeling, Iran.

Paper type- Scientific & Research.

Use your device to scan and read the article online



How to cite this article:

Darvishi, H., Rokneddin Eftekhari, A., Rahmani, B., Sarrafi, M. & Atashk, M. (2019). Analysis of factors affecting the inefficiency of spatial policies in rural areas of Iran. *Journal of Research & Rural Planning*, 8(2), 115-130.

<http://dx.doi.org/10.22067/jrrp.v5i4.73320>

* **Corresponding Author:**

Darvishi, Hedayat, Ph.D. Candidate

Address: Department of Human Geography, Faculty of Geo-Sciences, Shahid Beheshti University, Tehran, Iran.

Tel: +98213 327 4466

E-mail: hedayat_4@yahoo.com

1. Introduction

Rural development is a territorial and (spatial-based) space-based approach and is not necessarily a sectoral approach.

Rural development is one of the main goals of the development policy, however, there does not exist a unified approach on how to define and measure it (Jakub Straka & dufhodx, 2016).¹ In this regard, considering the territorial extent and the spatial-locational domain of rural settlements², (Naghsh-e Jahan Pars Consulting Engineers Co., 2016), the diversity and plurality of territorial capabilities of rural areas in various natural and ecological dimensions, as well as social and economic dimensions, and implementation and monitoring and observation of land require adopting a multi-sectoral, intersectoral, regional and inter-regional approach.

In addition, the product of spatial rural development planning is not just the description and application of the overall spatial structure of rural areas, but also includes the reflection and spatial manifestation of environmental, spatial, and cultural characteristics, unique relationships and the diversity of these structures. (Dina Poerwoningsiha, Antariksa, Setyo Leksono, & Abdul Wahid Hasyim, 2016).

In this regard, due to the absence of spatial development and regional economics in spatial-optimal policymaking, this category needs to be considered (Yang, Pu, & Cai Hao, 2015).

In this regard, due to the multiplicity, diversity, dispersion and underdevelopment of rural settlements and spatial evolution of rural areas, paving the grounds for spatial changes in rural areas (Saeedi, 2010) is subject to the objectivity of the requirements and suitable spatial planning policy for optimal utilization of territorial potentials. In this regard, what has caused the collapse of rural settlements in the territory of the land is the lack of attention to these settlements in national and regional planning and policy-making (Saeedi, 2010).

Therefore, it should be noted that the product of suitable spatial planning policy requires a collaborative process based on the principles of good regional governance.

This process and product also require the design and implementation of a development model based on the sustainable regional development principles. In this way, the structure and spatial organization of the regions can be influenced so that it can bring about an objective and practical field of development and regional balance. In addition, in this regard, what needs to be addressed is the identification and extent of the impact of the inefficient factors of the rural development policy system in Iran, which can be considered an undesirable event in the geographic distribution of rural areas in Iran.

Meanwhile, this incident can be caused by several factors in various economic, social and physical (spatial) dimensions which has had adverse consequences at different national, regional, territorial and rural levels and scale.

Accordingly, the main purpose of this paper is to model the factors affecting the inefficiency of planning policy for rural development in Iran with the interpretative structural modeling approach. Using a new analytical methodology, interpretative structural modeling, the relationship between the factors affecting the ineffectiveness of the rural development policy system in Iran has been determined and analyzed in a unified manner. The output of this research as a product of research policy will provide the national and regional development policy makers with a clear and quantitative picture on ineffective factors of policies adopted in the rural areas of Iran.

By identifying factors and prioritizing them, based on the existing reality and not on the basis of ideals, they can develop methods to improve the current less developed status of rural areas and

1-The reason for the lack of a single and unified definition of measuring the category and concept of rural development in the world can be considered these factors: Different territorial (spatial) features of countries, the existence of different definitions and approaches in various issues such as; local development, regional development, marginal development and lack of consensus on the use of the above-mentioned items to describe rural development

2. Some indexes and variables on rural development indicate the spatial extension and the dimensions of this section. In this regard, the population distribution of rural areas in Iran is 20,730,625, which is 26% of the country's population, and there are 96549 villages, with the economic participation rate of 40.1%. Moreover, the share of employment in the agricultural sector is 49%, and the literacy rate is 84.8%.

also improve the effectiveness of the policies adopted in these areas. Regarding this, the present research seeks to answer the following questions:

1. What are the factors affecting the ineffectiveness of planning policy for rural development in Iran?
2. How is the clustering of factors affecting the ineffectiveness of the spatial planning policy system of rural development in Iran?

2. Research Theoretical Literature

2.1. Theoretical framework

The theoretical explanation of a problem requires an appropriate theoretical framework. Therefore, choosing the most appropriate theory of regional policy development from sustainable development theories is considered as one of the strategic steps (Ruknedin Eftekhari, 2017).

In this regard, the recognition of developmental concepts such as space, which its objectivity results from the impact and effectiveness of human beings is in place (Saeedi, 2010). Development space is a priority as a source of scarcity and requires policy and planning in line with the optimal allocation and in accordance with the public interest (Sarraf, 2015).

The spatial policy considered in this article is an approach aimed at providing strategic opportunities at different levels of biological spaces, integrating multiple decisions about locations and strengthening intersectoral integration. Hence, it is a coordinating dimension of sectoral policies based on the land strategy (Ruknedin Eftekhari, 2017).

With this in mind, rural areas as “geographic objectivity” or “spatial reality” is the result of the impact of the reciprocal interactions between the two natural environments and the socio-cultural environment, or, in other words, the result of tension and the adjustment of the relationship of the three main components, namely, man, activity and space. This continuous spatial system is changing, which is not only affected by the forces and processes of the system, but also, in practice, it is affected by a set of external forces and processes that originate from other spatial or non-spatial realities (Saeedi, 2010).

Thus, following this process, rural settlements, rural areas, are subject to innovations which are often formed outside of rural areas (Saeedi, 2010). One of the most important factors influencing the structure and functioning of rural settlements (in

terms of environmental, socio-economic, and especially physical-spatial dimensions) is making decisions and policies under the name of developmental policy in rural areas that will cause spatial changes with its procedures, attitudes and strategies. Each of these changes has both favorable and unfavorable consequences. In this regard, for territorial and sectional organization and effectiveness, various attitudes have been applied in the national, regional and local dimensions (micro or rural). Each of them, on the one hand, has its own specific requirements and, on the other hand, has had various consequences, including the following attitudes: (Jabari, as cited in Kazimian, 2010)

- Sectoral attitude;
- Physical attitude;
- Spatial attitude;
- Socio-economic attitude with special attention to the dimensions of new institutions;
- Momentary and superficial attitudes toward the development of local and regional levels (Table 1).

Moreover, from other dimensions, analyzing the theoretical approaches of regional development shows that from the policy point of view, four main approaches (sectional attitude, physical attitude, spatial attitude, institutional spatial attitude) have been considered and policies have been implemented in these attitudes (Eftekhari, 2017).¹

¹For further reading in this regard you can refer to: Theoretical Foundations in Urban Studies, by Ismail Zadeh, Hassan, p. 589.

Table 1. The five attitudes of local and regional development policy in Iran
(Source: Farajirad & Kazemian, 2013)

Dimensions	Attitudes of local and regional development policies in Iran				
	Sectoral	Physical	Spatial	Socio-economic attitude with special attention to the dimensions of new institutions	Momentary and superficial attitudes
Definition of the region	- Lack a definite definition of the region - In more recent plans, it has focused on provincial and city levels.	- Unknown and involves different levels.	- The share and levels are defined as the region. - In more recent plans, attention has been paid to provincial and city levels	- The region is defined in terms of small spatial units (below the city level) and relatively in terms of all socio-economic and environmental environments.	- It does not exist
Definition of regional development	- Mainly based on development projects, promotion of service indicators and the creation of infrastructure. - In more recent programs, the cultural and social dimensions of development have also been taken into consideration.	- Defined primarily based on determining land use and physical design	- Defined according to the balanced distribution of population and activities in accordance with the facilities and capabilities of the land.	-Regional development is defined in terms of the integrated process of economic and social development along with environmental protection.	- It is generally developmental and aimed at improving service indexes
Approach to development	- Mostly sectional and in more recent plans, attention has been paid to the dimensions of spatial planning.	- There is no definite approach	-Integrated spatial development approach with emphasis on economic, social and environmental dimensions.	- The institutional approach and sustainable development	- There is no definite approach
Policies / Tools	- Allocating financial resources to deprived areas - Establishing industrial and agricultural poles - Developing infrastructure in deprived areas	- Terms and conditions of how to use the land	-Futuristic scenarios - Land use maps at macro level	- Capacity building in the social, economic and productive areas, human capital and resources, infrastructure and support of production and environmental investments	- Civil projects
Decision making for development	- Completely centralized - Centralized and in the recent plans, attention has been paid to the role of provincial factors and institutions	- Centralized	- Centralized	- It is somewhat decentralized and emphasizes the role of local agents	- Completely centralized and top-down
Regional development management	- Centralized and through the National Center. - In the recent plans, attention has been paid to the role of provincial factors and institutions.	- Centralized, but at the same time, local institutions are involved in the implementation of the programs.	- Centralized, though, there are currently no specific national, provincial or local institutions for implementing such plans.	- Somewhat decentralized	- Centralized
Local / regional leadership	- In more recent plans, this has been noted in the form of provincial and city councils	- They don't care.	- They do not care, though, there are issues like social capital and capacity building.	- Emphasizes the role of local-level factors and institutions (such as councils and tenants, local trustees, and section and city level institutions).	- It does not exist.
Institutional elements	- Basically, these elements have not been considered - In more recent plans, more attention has been paid	It does not exist	It is considered very limited.	- Consider social capital, development of human resources and participation.	- It does not matter.

2.2. The research view

General policy; process or set of governmental activities and decisions aimed at solving a general problem (Amiri, 2011; as cited by Kazemian, 2015). In this regard, the purpose of the policy system is to arrange, approve, implement policies and / or programs and monitor them. Regarding regional development policy, rural development is a form of activity that is in the direction of regulating, controlling and managing the forces

that shape regional development. (Kazimyan, 2015) and allocates and distributes resources and facilities of the public section at the regional level. With this in mind, principles governing national centralized policy are based on this basic principle that the arrangements and mechanisms of regional development policy must necessarily be defined at national level, although these arrangements can extend to the regional level. Similarly, in the classic spatial planning approach and attitude like centralized national policy, regional policy is less

focused on the specific needs of each region and their different social issues. It mainly focuses on national macroeconomic (and rarely regional) frameworks, and has more potential for inter-regional balances (Sarraf, 1998). With this view, in this approach, regional policy is mainly aimed at defining and explaining the specific regional development paths and frameworks, and necessarily within the framework of national development. Considering the requirements and conditions of the classic spatial planning approach and attitude like centralized national policy, and its theoretical and operational shortcomings, the new institutional spatial planning approach in the form of new pluralism and regionalism is considered as the dominant view of this research. This approach seeks to identify a specific region (its scale can range from the national level to the international level) with various purposes (social, cultural, economic, political, and environmental)

to address problems that have been created from a range of local, national and transnational factors. The management system of this region is dominated by all actors (both governmental and non-governmental) and through institutions as both bottom-up and top-down. It is worth noting that this approach can be implemented in a variety of ways in different parts of the world depending on the characteristics of each place and at any given time (Sarraf & Nejati, 2014).

Institutional spatial / planning approach and attitude focuses on the institutional dimension of development as well as dimension of sustainable development. It also has a unified approach to development, especially to the regional development, and works within the framework of a bottom-up approach. (Rukneddin Eftekhari, 2017).

Table 2. Spatial planning and policy-making framework

(Source: Research finding, 2018)

Sectoral	Intersectional integration	Integration of different public policies over a territory
	Intra-organizational integration	Integration of policy, individual and voluntary activities in a territory
Territorial	Horizontal integration	Integration of spatial planning activities between adjacent areas and with shared areas or interests
	Vertical integration	Integration among various levels of spatial planning and policy-making activities
Organizational	Strategic Integration	Integration of spatial planning with other strategies, plans and activities in the territory
	Operational integrity	Integration of spatial planning with the mechanism of release in all relevant organizations in the territory
	Beneficiary integration	Integration of disciplines, stakeholders or disciplines governing the territory

Considering the dimensions and pathologies of different classical approaches in the field of territorial and sectoral policy of the country, in addition to the new approach of pluralism and new regionalism, the dominant view of this research is based on the principles of territorial

planning and through approaches of partnership, capacity building and empowerment. This approach generates a kind of need for a comprehensive, perspective, strategic, location-based, people-centered, ecocentric approach that focuses on both inter-sectoral relationships,

organizations, regions, and regional-sectoral relationships. This sense of need reflects a kind of transformation in the intellectual coordinates of policy-making, planning and administrative system of the country (Territorial Planning Office, 2005). What distinguishes this kind of policy-making, planning and administrative system from the others is paying attention to the features of being strategic, spatial, holistic, and comprehensive in an integrated approach (Table 2).

3. Research Methodology

The present research is applied in terms of its purpose and is considered as descriptive-analytical research in terms of research methodology. The data collection method is based on library-documentary and survey data and using data gathering tools such as interviewing, taking notes and structured questionnaires, and using the Delphi technique. In addition, according to the requirements of the Delphi technique (expert-based), 20 experts and managers of macro (national) and /or regional (province) levels were selected using a purposive sampling method. A remarkable point in determining the number of experts is to ensure the comprehensiveness of the different views in the research. The number of participating experts in the reviewed interpretive structural modeling (ISM) articles is usually

between 14 and 20. (Faisal, Banwet & Shankar, 2010; Ramesh, Banwet, Shankar, 2010).

After identifying and analyzing the factors affecting the inefficiency of rural development policy, using the Delphi technique and computing consensus indicators, the importance and priority of each factor, (ISM) and Mic Mac software were used to analyze the data. This model was introduced by Warfield in 1974 (Atashsooz, Feizi Kazazi, & Olfat, 2017). It is an interactive process, and while it is structuring a set of different elements which are systematically interacting with each other (Azar, Khosravani, & Jalali, 2013), it helps to investigate the complex relationships between elements (Azar & Bayat, 2008).

In this regard, the process of applying interpretive structural modeling is as follows:

Step One: Identifying the variables related to the problem,

Step Two: Creating the structural self-interaction matrix,

Step Three: Creating the initial reachability matrix

Step Four: Creating the final reachability matrix.

Step Five: Applying Warfield's level partitioning, and

The last step: Analyzing the degree of influence and dependence variables (MICMAC chart).

Table 3. Research methodology

Research Methodology	Statistical population, sampling method	Sampling logic and data analysis	Reasons
Quantitative and qualitative	Statistical population: Thematic experts from national and provincial institutions (Country and Provincial Planning and Budget Organization); Sampling method: Purposive Sample size: 20 people; Sample Type: Expert-centered.	Sampling logic and data analysis; Mastery of thematic and expert-centered; Delphi, micmac, Interpretive Structural Modeling.	One of the reasons for using this tool is its ability to investigate the reciprocal influence of each factor on each other and clustering factors according to the extent and intensity of the effect.

4. Research Findings

4.1. Identifying the factors affecting the ineffectiveness of the planning policy for rural development in Iran

Analyzing background and theoretical foundations of research regarding regional and rural development policy has led to the identification,

exploration and extraction of influencing factors and criteria in rural development policy. In this regard, due to the plurality of different factors, and in order to determine the degree of the consensus of the thematic and local experts regarding each factor and its importance, the reduction of criteria based on its importance has been done. In this regard, the experts were

provided with the Delphi questionnaire. The factors affecting the ineffectiveness of the spatial planning policy system of rural development, after

applying the experts' point of view, are presented in [Table \(4\)](#).

Table 4. Factors affecting the ineffectiveness of the planning policy for rural development in Iran

C1: The lack of unity in terms of policy and lack of plurality in terms of implementation,
C2: Shortcomings in participation and delegation of legal authority to villagers,
C3: Non comprehensive rural development programs,
C4: Reducing rural policy making to issues of deprivation,
C5: Point and sectorial attitude toward development of the rural areas and disregarding it as a territorial, spatial, trans sectional category
C6: The absence of a definite status for rural development policy and plurality and the existence of contradiction in laws,
C7: Imbalance in the development of rural areas,
C8: dependence on oil revenues and lack of stability in rural development policy,
C9: The centralized (imperative) system of policy, planning and decision making in rural development,
C10: Having no perspective on rural development policy,
C11: Attempting to schedule scattered actions and activities as rural development policies,
C12: Neglecting the economic diversification of rural development policy goals,
C13: Paying less attention to the self sufficiency of the rural development process and the emphasizing policy making based on government resources,
C14: Unspecified extent of rural development programs and policies,
C15: Non spatial rural development policy,
C16: Paying no attention to the competitiveness of rural areas,
C17: Inappropriate use of the internal potentials of rural areas (low attention to rural economy capacities),
C18: Paying low attention to the regional network approach and the lack of integration in urban rural policies and adopting a hierarchical approach and a growth pole strategy,
C20: Diversity, plurality, dispersion and underdevelopment of rural settlements

4.2. Structural self–interaction matrix

After exploring the factors affecting the inefficiency of rural development policy in Iran (20 factors in [Table 4](#)), the aforementioned factors were entered into a self–interaction matrix. To do so, the factors agreed by the experts were mentioned in the first row and column of the table, and respondents were asked to specify the type of two-way connection between the factors. Therefore, this matrix was constructed using four conceptual relationships and was completed by 20 experts from the field of spatial planning and policy (territorial planning, regional development,

rural development). The obtained data are summarized based on the interpretive structural modeling technique and the final structural self–interaction matrix is made ([Table 5](#)). The symbols and modes used in this conceptual relationship are:

- Symbol V: It means that i leads to j.
- Symbol A: It means that j leads to i.
- Symbol X: Two-way connection from i to j and vice versa
- Symbol O: There is no connection between i and j.

Table 5. Structural self-interaction matrix of factors affecting the ineffectiveness of planning policy for rural development in Iran
(Source: Research findings, 2017)

T-C	19C	1AC	1VC	19C	1AC	19C	C1Y	C1Y	C11	C1+	C9	CA	CV	CF	CD	CF	CY	CY	C1	J I
A	A	v	o	v	v	A	v	o	v	v	v	o	v	v	v	v	v	o		C1
o	o	o	v	v	o	o	x	v	o	o	x	A	o	x	o	v	o			C2
o	o	v	v	v	v	o	v	v	v	v	A	o	v	x	A	v				C3
A	A	x	v	v	v	v	v	v	v	v	o	o	v	A	A					CF
o	o	x	v	v	o	v	o	v	v	x	x	o	v	A						CD
o	o	x	v	v	o	o	v	v	v	x	o	o	v							CF
x	x	A	A	A	A	o	o	A	A	A	A	A								CV
o	v	o	v	x	o	o	v	v	o	o	v									CA
o	o	v	o	v	o	o	A	o	o	o										C9
o	o	o	o	v	o	x	x	v	A											C1+
o	A	A	v	v	v	o	v	o	v											C11
o	x	v	v	O	O	O	X													C1Y
O	O	V	V	V	O	V														C1Y
O	O	O	O	O	O															C1F
O	X	X	X	X																C1D
O	A	O	A																	C1F
X	X	X																		C1V
X	X																			C1A
A																				C19
																				C2+

4.3. Initial reachability matrix

The structural self-interaction matrix is converted to zero and one matrices, which is called the initial reachability matrix (Firoozjayan, Firoozjayan, Hashmi, Gholamreazadeh, 2013).

In this matrix, 1 replaces V; X and also 0 replaces A; O. After converting all rows, result is called the initial reachability matrix. By converting the SSIM matrix relationships to 0 and 1, the matrix can be matched according to the following rules. These rules are as follows:

1. If the block (i, j) in the SSIM matrix has the V symbol, the corresponding block in the

reachability matrix is 1, and its symmetric block, i.e., (j, i), is 0.

2. If the block (i, j) in the SSIM matrix has the symbol A, the corresponding block in the reachability matrix is 0 and its symmetric block, i.e., (j, i), is 1.

3. If the block (i, j) in the SSIM matrix has the symbol X, the corresponding block in the reachability matrix is 1 and its symmetric block, i (j, i), is 1.

4. If the house (i, j) in the SSIM matrix has the symbol O, the corresponding block in the reachability matrix is 0 and its symmetric block, i.e., (j, i), is 0.

According to the rules of the ISM technique, the initial reachability matrix is shown in Table 6.

Table 6. Initial reachability matrix
(Source: Research findings, 2017)

	CT*	C19	C1A	C1V	C1F	C1δ	C1F	C1Y	C1Y	C1I	C1*	C9	CA	CV	CF	Cδ	CF	CT	CT	C1	J I	
·	·	√	√	√	√	·	√	√	√	√	·	·	√	√	√	√	√	√	√	√	1	C1
·	·	·	√	·	·	·	√	√	·	·	·	·	·	·	·	√	·	·	·	√	0	CT
·	·	√	√	√	√	·	√	√	·	·	·	·	·	√	·	·	·	√	·	√	0	CT
√	·	√	√	√	√	·	√	√	√	·	·	·	·	√	·	·	√	0	0	0	0	CF
√	·	√	√	√	√	√	√	√	√	√	·	·	·	√	√	√	1	1	0	0	0	Cδ
√	√	√	·	·	√	√	√	√	√	√	·	·	·	√	√	√	1	1	1	0	0	CF
·	·	·	·	·	·	·	·	·	·	·	·	·	·	√	0	0	0	0	0	0	0	CV
√	√	√	√	√	√	·	√	√	√	√	√	·	√	√	1	0	1	1	1	1	1	CA
√	√	√	√	√	√	√	√	√	√	√	√	√	·	√	0	1	1	1	1	1	0	C9
·	·	·	·	√	·	·	·	·	√	·	√	0	0	1	1	1	1	1	1	1	1	C1*
√	·	·	√	·	·	·	·	·	√	√	0	0	0	1	0	0	1	0	0	0	0	C1I
·	·	·	√	·	·	·	·	·	√	√	0	0	0	0	1	0	0	1	1	0	0	C1Y
√	√	√	√	√	√	·	√	√	√	√	√	·	·	·	√	0	0	0	0	1	0	C1Y
√	·	·	√	√	0	√	√	0	0	0	0	0	0	0	1	0	0	0	0	0	0	C1F
√	·	√	√	√	√	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	C1δ
√	·	·	1	√	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	C1F
√	·	√	√	1	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	1	0	C1V
√	·	√	√	1	1	1	0	0	1	0	0	0	0	1	0	0	1	1	0	0	0	C1A
√	√	1	1	1	1	1	0	1	1	1	0	0	1	0	1	1	1	1	1	0	0	C19
√	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	CT*

4.4. Final reachability matrix

The final reachability matrix indicates the reciprocal influences of factors affecting the inefficiency of planning policy for rural development and their pairwise comparison.

In addition, in the final reachability matrix, the driving power is the final number of variables (including itself) that can be involved in their creation, and the dependence power that

represents the final number of variables, which create the mentioned variables.

In this regard, due to the fact that a plenty of experts participated in the study and they responded differently to the factors, the mean of “driving power” and “dependence power” of all factors was selected as the basis for the final driving power and dependence power.

Table 7. Final reachability matrix
(Source: Research findings, 2017)

influen e	CT*	C19	C1A	C1V	C1F	C1δ	C1F	C1Y	C1Y	C1I	C1*	C9	CA	CV	CF	Cδ	CF	CT	CT	C1	J I	
√	·	·	√	√	√	·	√	√	√	√	·	·	√	√	√	√	√	√	√	√	1	C1
·	·	·	√	·	·	·	√	√	·	·	·	·	·	·	·	√	·	·	·	√	0	CT
√	·	·	√	√	√	·	√	√	·	·	·	·	·	√	·	·	√	·	√	0	0	CT
√	√	·	√	√	√	√	√	√	√	√	·	·	·	√	·	·	√	0	0	0	0	CF
√	√	·	√	√	√	√	√	√	√	√	√	·	·	√	√	√	1	1	0	0	0	Cδ
√	√	√	√	√	√	√	√	√	√	√	√	·	·	√	√	√	1	1	1	0	0	CF
·	·	·	·	·	·	·	·	·	·	·	·	·	·	√	0	0	0	0	0	0	0	CV
√	√	√	√	√	√	√	√	√	√	√	√	·	√	√	1	0	1	1	1	1	1	CA
√	√	√	√	√	√	√	√	√	√	√	√	√	·	√	0	1	1	1	1	1	0	C9
·	·	·	·	·	√	·	·	·	·	√	·	√	0	0	1	1	1	1	1	1	1	C1*
0	√	·	·	·	·	·	·	·	√	√	0	0	0	1	0	0	1	0	0	0	0	C1I
0	·	·	·	√	·	·	·	·	√	√	0	0	0	0	1	0	0	1	1	0	0	C1Y
√	√	√	√	√	√	√	√	√	√	√	√	·	·	·	√	0	0	0	0	1	0	C1Y
·	√	·	·	√	√	0	√	0	0	0	0	0	0	0	1	0	0	0	0	0	0	C1F
0	√	·	√	√	√	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	C1δ
√	√	·	·	1	√	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	C1F
√	√	·	√	√	1	0	0	0	1	0	0	0	0	0	1	0	0	0	0	1	0	C1V
√	√	·	√	√	1	1	1	0	0	1	0	0	0	0	1	0	0	1	1	0	0	C1A
√	√	√	√	1	1	1	1	0	1	1	1	0	0	1	0	1	1	1	1	1	0	C19
√	√	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	CT*
√	13	4	11	16	13	10	4	9	13	7	6	1	0	17	4	7	11	9	7	3	Dependenc y	

In [table \(7\)](#), the driving power (the effect of each factor on other factors) of the factors affecting the inefficiency of planning policy for rural development in Iran is shown. The results indicate that the “centralized (imperative) policy-making, planning and decision making system in rural development”, “dependence on oil revenues and lack of stability of rural development policy” and “lack of unity in terms of policy and plurality in terms of implementation (sectional)” have the greatest influence on other factors each, with a driving power of (16), (16), (14), respectively. In other words, these factors are considered to be the most effective factors on the ineffectiveness of planning policy for rural development and it can be noted that these factors have the least degree of dependency on the other factors. In other words, these factors are considered to be the most effective factors on the ineffectiveness of planning

policy for rural development and it can be noted that these factors with the least dependence power on the other factors have little effectiveness (dependency). Moreover, the factors of “diversity, plurality, dispersion and underdevelopment of rural settlements” and “inability to develop in rural areas” have the least influence on other factors, respectively, with the driving power of (4.3) and (6.3). In other words, these factors are strongly influenced by other factors.

4.5. Leveling and clustering of factors influencing the ineffectiveness of planning policy for rural development in Iran

At this stage of the research process, for the leveling and clustering of effective factors in the ineffectiveness of rural development planning policy, the following steps were identified:

Table 8. Leveling factors affecting the ineffectiveness of rural development planning policy in Iran
(Source: Research findings, 2017)

FACTOR	Output Collection	Entrance Collection	Common collection
C1	2-3-4-5-6-7-10-11-12-13-15-16-17-18	8-9-10	10
C2	5-12-13-17	1-8-110-13-16-17-19	13-17
C3	4-7-12-13-15-16-17-18	1-5-6-8-9-10-12-18-19	12-18
C4	7-11-12-13-15-16-17-18-20	1-3-5-6-8-9-10-11-12-13-18-19	11-12-13-18
C5	3-4-6-7-10-11-12-13-14-15-16-17-18-20	1-2-6-8-9-10-19	6-10
C6	3-4-5-7-10-11-12-13-14-15-17-18-19-20	1-5-19-10	5-10
C7		1-3-4-5-6-8-9-10-11-12-13-14-15-17-18-19-20	
C8	1-2-3-4-5-6-7-8-9-10-11-12-13-15-16-17-18-19-20		
C9	1-3-4-5-6-7-10-11-12-13-14-15-17-18-19-20	8	
C10	1-2-3-4-5-6-7-12-16	1-5-6-8-9-19	1-5
C11	4-7-12-17-20	1-4-5-6-8-9-19	4
C12	3-4-7-13-17	1-2-3-4-5-6-8-9-10-11-17-18-19	3-4-17
C13	2-7-15-16-17-18-19-20	1-2-3-4-5-6-8-9-12	2
C14	7-16-17-20	5-6-9-19	
C15	7-16-17-18-20	1-3-4-5-8-9-13-18-19	18
C16	2-17-20	1-3-4-5-8-9-10-13-14-15-17-18-19	17
C17	2-7-12-16-18-20	1-2-3-4-5-6-8-9-11-12-13-14-15-16-17-18	2-12-16-18
C18	3-4-7-12-15-16-17-20	1-2-3-4-5-6-8-9-13-15-17-18	3-4-15-17
C19	2-3-4-5-6-7-10-11-12-14-15-16-17-18-20	6-8-9-13	
C20	7	4-5-6-8-9-11-13-14-15-16-17-18-19	

a) Identification and extraction of input/ antecedent set and output / succedent set: At this stage of the research process, it has been attempted to identify the input / antecedent set and output / succedent set of each of the mentioned factors. In this way, the input or antecedent set of each criterion includes criteria that lead to that criterion or which affects it (the criteria that in the column related to their counterpart, there is 1). The output / succedent set shows a collection of criteria that is affected by a single criterion or component of the system. In other words, for each variable in the final model, there are three output, input and shared sets. (Table 8)

b) Identification and extraction of a shared set: At this stage, after identifying and extracting the input and output set of each of the factors, the factors that are shared between the input set and the output set are considered as a common set. Obviously, there are as many common sets as the number of factors (n=20), in other words, according to the existence of 20 factors, there are 20 shared sets (Table 8)

c) Leveling: At this stage, after extracting the shared set, to determine the level of each variable

in the final model, the variables whose input and output sets are the same, in the hierarchy process, are considered as the shared set, and are located at the highest level of the hierarchy. In this regard, after identifying the highest level, those variables are removed from the list of other variables. These repetitions are continued until the levels of all variables are determined. In other words, after determining the level, the criterion for which the level has been determined is removed from the entire set, and the set of inputs and outputs is formed again and the next variable level is obtained. In the current study, the six levels of variables were obtained in 20 tables, and the final result of is represented in Table (8).

d) Clustering factors using the MICMAC software At this stage of the research process, after determining the extent of the reciprocal influence of each factors, or, in other words, determining the driving power and dependence power of the factors affecting the ineffectiveness of planning policy for rural development in Iran, each of these factors using soft MicMac is categorized in one of the four below clusters. (Table 9)

Table 9. Clustering factors affecting the ineffectiveness of planning policy for rural development

(Source: Research findings, 2017)

Code	Cluster type	Cluster feature	List of factors related to the cluster
1	Dependent variables	Weak driving power and dependence power	C13, C14, C11, C2
2	Independent variables	Weak driving power but high dependence power	C7, C17, C20, C16.C12, C15, C18, C4, C3
3	Effective variables	High driving power and dependence power	Does not have
4	Strategic variables (Autonomous variables)	High driving power and high dependence power	C9.C8, C1, C6, C19, C5, C10

Table 10. Affecting and affected factors of quadruple clusters of planning policy for rural development

(Source: Research findings, 2017)

Code	Cluster type	The most affecting cluster factor	The most affected cluster factor
1	Dependent variables	C11	C14
2	Independent variables	C18	C3
3	Effective variables	-	-
4	Strategic variables (Autonomous variables)	C9	C9

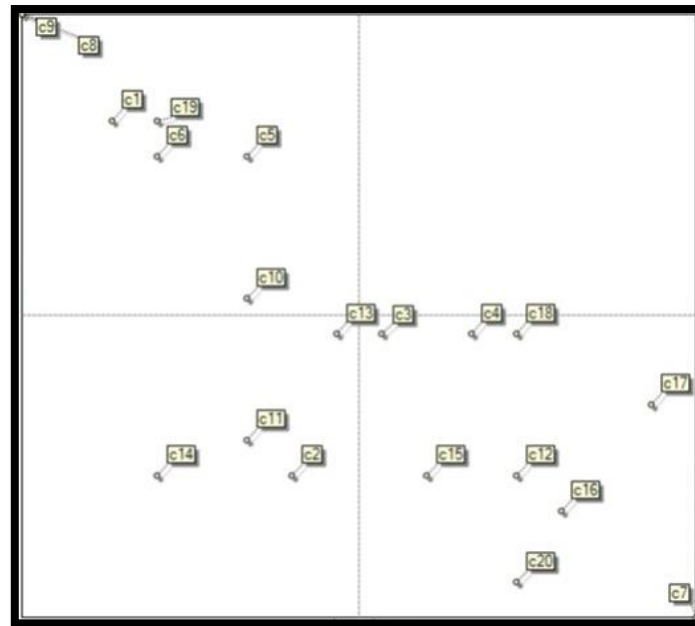


Figure 1. Clustering factors affecting the ineffectiveness of planning policy for rural development in Iran
(Source: Research findings, 2017)

As shown in figure (1), the independent variables include: unbalanced variables in the development of rural areas, neglecting the competitiveness of rural areas, the inappropriate use of the internal potentials of rural areas (low attention to rural economy capacities), diversity, plurality, dispersion and underdevelopment of rural settlements, neglecting the economic diversification of rural development policy goals, non-spatial rural development policy, paying low attention to the regional network approach and the lack of integration in urban-rural policies, non-comprehensive rural development programs, and reducing rural policy-making to issues of deprivation. The main characteristic of these variables is the low degree of reciprocal influence with other variables.

The variables of dependency on oil revenues and the lack of stability in rural development policy, centralized (imperative) policy-making, planning and decision making system for rural development, lack of unity in terms of policy and plurality in terms of implementation, point and sectorial attitude toward development of the rural areas and disregarding it as a territorial, spatial, intersectional category, the absence of a definite status for rural development policy and plurality and the existence of contradiction in laws, and inconsistency of policy making based on policy

research are autonomous and strategic variables for regional development. These variables have a huge influence on the ineffectiveness of the regional development policy system in Iran, and have high driving power and high dependence power.

Variables of shortcomings in participation and delegation of legal authority to villagers, attempting to schedule scattered actions and activities as rural development policies, and unspecified extent of rural development programs and policies are in the group of dependent variables, which have low driving power and high dependence power. The main characteristic of these variables is the lower affecting than other variables and the high degree of being affected from the variables of other clusters.

5. Discussion and Conclusion

Improving the status and role of rural settlements in spatial development planning policy system and considering it as a trans-sectional, intersectoral, regional and sectoral-regional issue requires adopting and implementing a planning approach. This approach generates a kind of need for a comprehensive approach which can analyze the factors and combine them into an integrated whole. In this regard, identifying the factors affecting the ineffectiveness of this approach for rural development with using territorial planning

approach and understanding the extent of reciprocal influence of each of the factors are the objectives of the present study. According to the mentioned objectives, identifying 20 factors and determining the consensus of experts about each inefficient factor for rural development policy is one of the results of the qualitative section of this research. In this regard, the consensus of experts on the above-mentioned factors is higher than 70%. On the other hand, the most important results of the quantitative part of the research are determining the level of driving power and dependence power of the above-mentioned factors. In this regard, from the factors mentioned above, the factors "dependence on oil revenues and lack of stability of rural development policy" and "The centralized (imperative) system of policy, planning and decision making in rural development" are considered the most affecting factors in the inefficiency of planning policy system for rural development. In addition, from the factors mentioned above, the factors of "inappropriate use of the internal potentials of rural areas (low attention to rural economy capacities)" and "imbalance in the development of rural areas" have higher dependence power than the other factors.

Moreover, according to clustering of 20 factors, there are 9 factors in the cluster of independent factors which have low driving power and

dependence power. In addition, there are 4 factors in the cluster of dependent factors which have relatively low driving power and high dependence power. On the other hand, 7 factors are considered as strategic or autonomous factors which have high driving power and high dependence power. However, in the cluster of affecting variables that have a low dependence power and a relatively higher driving power, the results indicates this fact that there is no factor in this cluster.

In addition, analyzing the investigations carried out in the field of policy making and its comparison with the results of current research indicate that considering the use of the interpretive structural modeling and the MICMAC software, the obtained results have been as a result of comparing the inefficiency of rural development policy. This kind of comparing factors results in clustering of several factors in each of the above-mentioned clusters. Moreover, this type of clustering factors enables integrated and combined decision making on rural development policy. However, in other studies, each factor has been analyzed separately.

Acknowledgments: The current paper is extracted from the doctoral dissertation of the first author (Hedayat Darvishi) in the Department of Human Geography & Landuse Planning, Faculty of Geo-Sciences, Shahid Beheshti University, Tehran, Iran.

References

1. Atashsooz, A., Feizi Kazazi, A., & Olfat, L. (1395/2016). Interpretive structural modeling of petrochemical industry supplies chain risks. *Quarterly Journal of Industrial Management Studies*, 4(41), 63-39. [In Persian]
2. Azar, A., & Bayat, K. (1387/2008). Designing a model for "Business Process-Oriented" using Interpretive Structural Modeling approach (ISM). *Journal of Information Technology Management*, 1(1), 18-30. [In Persian]
3. Azar, A., Khosravani, P., & Jalali, R. (1392/2013). *Soft operational research* (1st Ed.). Tehran. Industrial Management Publication Press. [In Persian]
4. Dina, P., Antariksa, A., Setyo, L., & Abdul Wahid, H. (2016). Integrating visibility analysis in rural spatial planning. *Journal of Social and Behavioral Sciences*, 227.838-844.
5. Faisal, M., Banwet, D.K., & Shankar, R. (2006). Supply chain risk mitigation: Modelling the enablers. *Business Process Management*, 12(4), 535-552.
6. Faraji, A. (1392/2013). *A survey of balanced regional development pattern with an emphasis on the relationship between rural and urban areas: The case of the Qazvin Region* (Doctoral dissertation). University of Tehran, Tehran, Iran. [In Persian]
7. Firoozjayan, A.A., Firoozjayan, M., Hashmi, H., Gholamreazadeh, F. (1393/2014). Application of structural-interpretative modeling technique in tourism studies. *Journal of Tourism Planning and Development*, 2 (2), 129-159. [In Persian]
8. Iranian Management and Planning Organization. (1390/2011). *The General policy of the territorial planning*. Tehran: Expediency Discernment Council Press. [In Persian]

9. Iranian Management and Planning Organization. (1393/2014). *National orientation for territorial planning*. Tehran: Management and Planning Organization Press. [In Persian]
10. Iranian Management and Planning Organization. (1394/2015). *National orientation revised for territorial planning*. Tehran: Plan and Budget Organization Press. [In Persian]
11. Jakub, S., and duhodx, Rya. (2016). Factors affecting development of rural areas in the Czech Republic: A literature review. *Procedia-Social and Behavioral Sciences*, 220(9), 496-505.
12. Kazimian, Gh. (1387/2008). Developing indicators for monitoring general policies of the territorial planning, Theran, Expediency Discernment Council Press. [In Persian]
13. Naghsh-e Jahan Pars Consulting Engineers. (1394/2015). *Designing a pattern and developing strategies for reducing provincial imbalances*. Theran: Planning and Budget Organization press. [In Persian]
14. Ramesh, A., Banwet, D.K., Shankar, R. (2010). Modeling the Barriers of Supply Chain Collaboration. *Journal of Modelling in Management*, 5(2), 176–193.
15. Rukneddin Eftekhari, A. (1396/2017). *A look at the concept of spatial planning, in the series of specialized planning meetings for territorial planning*. Tehran: Tehran Publications. [In Persian]
16. Ruknedin Eftekhari, A. (1396/2017). *A new regional approach to overcome the challenges of human settlements*. Tehran. Tisa Publication. [In Persian]
17. Saeedi, A. (1389/2010). Environment, space and development: A discussion on the necessity of integrated urban-rural development. *Journal of Housing and Rural Environment*, 131, 3-12. [In Persian]
18. Sarrafi, M. (1377/1998). *Fundamentals of regional development planning*. Tehran: Plan and Budget Organization Press. [In Persian]
19. Sarrafi, M., & Nejati, N. (1393/2014). The new regionalism approach to improve Iran's spatial development management system. *Human Geography Research*, 46(4), 857-874. [In Persian]
20. Yang, Z., Hao, P., & Cai, J. (2015). Economic clusters: A bridge between economic and spatial policies in the case of Beijing. *Cities*, 42, 171-185.



تحلیل عوامل اثرگذار بر ناکارآمدی نظام سیاستگذاری آمایشی در مناطق روستایی ایران

هدایت درویشی^{۱*} - عبدالرضا رکن‌الدین افتخاری^۲ - بیژن رحمانی^۳ - مظفر صرافی^۴ - محمد آتشک^۵

۱- دانشجوی دکتری جغرافیا و برنامه‌ریزی روستایی، دانشگاه شهید بهشتی، تهران، ایران.

۲- استاد جغرافیا و برنامه‌ریزی روستایی، دانشگاه تربیت مدرس، تهران، ایران.

۳- دانشیار جغرافیا و برنامه‌ریزی روستایی، دانشگاه شهید بهشتی، تهران، ایران.

۴- دانشیار برنامه‌ریزی منطقه‌ای، دانشگاه شهید بهشتی، تهران، ایران.

۵- دکتری جغرافیا و برنامه‌ریزی روستایی، دانشگاه آزاد اسلامی، واحد تهران جنوب، تهران، ایران.

تاریخ پذیرش: ۱۰/اسفند ۱۳۹۷

تاریخ دریافت: ۱۶ خرداد ۱۳۹۷

چکیده مبسوط

۱. مقدمه

توسعه روستایی به عنوان یک مقوله سرزمینی و فضا مبنای می باشد و الزاماً یک مقوله بخشی نمی باشد. در این راستا با توجه به قلمرو مکانی- فضایی متفاوت سکونتگاههای روستایی، تنوع و تکثر قابلیت‌های سرزمینی عرصه‌های روستایی در ابعاد مختلف طبیعی - اکولوژیک و اجتماعی، اقتصادی، توجه به این عرصه‌های فضایی در ابعاد مختلف نظیر، سیاستگذاری، برنامه ریزی، اجرا و پایش و رصد سرزمینی نیازمند اتخاذ رویکردی چند بخشی، بین‌بخشی، منطقه‌ای و بین منطقه‌ای، در قالب رویکرد یکپارچه سیاستگذاری آمایشی می باشد. لذا شناسایی و میزان اثرگذاری عوامل ناکارآمدی نظام سیاست‌گذاری توسعه روستایی در ایران بایستی مشخص گردد. با توجه به این مهم، پژوهش حاضر به دنبال پاسخگویی به سوالات زیر می‌باشد:

۱- عوامل موثر بر ناکارآمدی نظام سیاست‌گذاری آمایشی توسعه روستایی در ایران کدامند؟

۲- خوشه‌بندی عوامل موثر بر ناکارآمدی نظام سیاست‌گذاری آمایشی توسعه روستایی در ایران چگونه است؟

۲. مبانی نظری تحقیق

تبیین تئوریک مساله، نیازمند دستیابی به یک چهارچوب نظری مناسب است. سیاستگذاری فضایی، رهیافتی است به منظور فراهم

* نویسنده مسئول:

هدایت درویشی

آدرس: گروه جغرافیای انسانی و آمایش، دانشکده علوم زمین، دانشگاه شهید بهشتی، تهران، ایران.

پست الکترونیکی: hedayat_4@yahoo.com

کردن فرصت‌های راهبردی در سطوح مختلف فضاهای زیستی، یکپارچه کردن تصمیم‌های چندگانه در مورد مکان‌ها و تقویت یکپارچگی میان بخش‌ها است از این رو هماهنگ کننده ابعاد سیاست‌های بخشی بر مبنای راهبرد سرزمین است. تحلیل و واکاوی رویکردهای نظری توسعه منطقه‌ای نشان می‌دهد که از جنبه سیاستگذاری، چهار نگرش اصلی (نگرش بخشی، نگرش فیزیکی و کالبدی، نگرش آمایشی- فضایی و نگرش آمایشی- فضایی نهادگرا مطرح بوده و سیاستگذاری‌های صورت گرفته هم در قالب این نگرش‌ها انجام پذیرفته است. در این راستا، رهیافت جدید آمایشی- فضایی نهادگرا در قالب تکثر گرایی و منطقه گرایی جدید دربرگیرنده تمامی بازیگران (اعم از دولتی و غیردولتی) و از طریق نهادها به صورت توأمان پایین به بالا و بالا به پایین، شکل می‌گیرد.

۳. روش تحقیق

پژوهش حاضر از لحاظ هدف‌گذاری کاربردی و از نظر ماهیت، توصیفی-تحلیلی است.

شیوه گردآوری داده‌ها، مبتنی بر داده‌های کتابخانه‌ای- اسنادی و پیمایشی و بهره‌گیری از ابزار گردآوری داده‌ها نظیر؛ فیش برداری و پرسشنامه ساخت یافته و بهره‌گیری از تکنیک دلفی است. افزون بر این، با توجه به الزامات بکارگیری روش دلفی (خبره محوری) تعداد ۲۰ نفر از کارشناسان و مدیران سطوح کلان (ملی)، منطقه ای (استان) با استفاده از روش نمونه‌گیری هدفمند، انتخاب گردید.

بهبود جایگاه و نقش سکونتگاه‌های روستایی در نظام سیاستگذاری توسعه فضایی، نیازمند اتخاذ و بکارگیری رویکرد آمایشی است؛ نتایج پژوهش نشان می‌دهد که در بخش کیفی پژوهش ۲۰ عامل واکاوی شده است و در بخش کمی پژوهش از بین عوامل واکاوی شده، عوامل «وابستگی به درآمدهای نفتی و نداشتن ثبات سیاستگذاری توسعه روستایی» و «نظام متمرکز (دستوری) سیاستگذاری، برنامه ریزی و تصمیم‌گیری در توسعه روستایی» اثرگذارترین عوامل در ناکارآمدی نظام سیاستگذاری آمایشی توسعه روستایی قلمداد شده است.

کلمات کلیدی: توسعه روستایی، سیاستگذاری آمایشی، مدل‌سازی تفسیری - ساختاری، ایران.

تشکر و قدرانی

پژوهش حاضر برگرفته از رساله دکتری هدایت درویشی، گروه جغرافیای انسانی و آمایش، دانشکده علوم زمین، دانشگاه شهید بهشتی، تهران است.

جهت تجزیه و تحلیل داده‌ها از مدل تفسیری- ساختاری ISM و نرم افزار MicMac بهره گرفته شده است.

۴. یافته‌های تحقیق

به منظور تحلیل عوامل اثرگذار بر ناکارآمدی نظام سیاستگذاری آمایشی در مناطق روستایی ایران، مراحل نظیر؛ شناسایی متغیرهای مربوط به مسئله، تشکیل ماتریس خودتعاملی ساختاری، ایجاد ماتریس دسترسی اولیه، ایجاد ماتریس دسترسی نهایی، تجزیه و تحلیل قدرت نفوذ، میزان وابستگی و خوشه‌بندی عوامل اثرگذار در ناکارآمدی سیاستگذاری آمایشی توسعه روستایی انجام شده است که این عوامل در خوشه‌های نظیر؛ متغیرهای وابسته، متغیرهای مستقل، متغیرهای اثرگذار و متغیرهای استراتژیک (کلیدی) مشخص شده است.

۵. بحث و نتیجه‌گیری

ارجاع: درویشی، ه.، رکن‌الدین افتخاری، ع.، رحمانی، ب.، صرافی، م. و آتشک، م. (۱۳۹۸). تحلیل عوامل اثرگذار بر ناکارآمدی نظام سیاستگذاری آمایشی در مناطق روستایی ایران. *مجله پژوهش و برنامه‌ریزی روستایی*، ۸(۲)، ۱۱۵-۱۳۰.
<http://dx.doi.org/10.22067/jrrp.v5i4.73320>