



Feasibility of Gathering Plain Rural Type towards Sustainable Development in Guilan Province, Iran

Nasrollah Molaei Hashjin^{1*} and Eisa Pourramzan²

Received: 11 April 2016,
Accepted: 19 June 2017

Abstract

The gathering of rural type in Guilan plains is a kind of planning for physical development of rural settlements that aims at changing dwellers' lifestyle from a dispersed to a semi-dispersed state. This change will reduce the problems and difficulties of villages. In addition, it is an optimal way to exploit the resources and facilities for making a desirable spatial organization for villagers' settlement in rural areas, which in turn provides a favorable condition for the development of a new pattern of settlement. The results of this study suggest that experts' point of view toward gathering of plain rural types in Guilan province is positive and it can have significant role in alleviating the problems and difficulties of the villages. Also, optimal exploitation of space and achieving rural sustainable development are other side effects of this plan. Because of the low level of information, prominent culture, cultural obstacles and the lack of clear rules and regulations in this field are the main obstacles to run this plan in a short-term period. Given these limitations, the process of gathering plain rural type, then, requires the governmental support, the use of experts in rural development planning, as well as villagers' cooperation.

Keywords:

experts, feasibility, gathering, Guilan plains, rural type, sustainable development

¹ Professor, Department of Geography, Rasht Branch, Islamic Azad University, Rasht, Iran

² Assistant Professor, Department of Geography, Rasht Branch, Islamic Azad University, Rasht, Iran

* Corresponding author's email: nmolaeih@iaurasht.ac.ir

INTRODUCTION

The planning and arrangement of rural settlements have continually been explained in different concepts and standards since the beginning of human life and the exploitation of natural resources (Saeedi, 2015). The goal of plain rural type gathering is to change villagers' lifestyle from a dispersed to a semi-dispersed state in Guilan plains and it can be considered as a type of planning for physical development of rural settlements as a part of rural development process (Molaei Hashjin, 2002). Its goal is to ensure optimal use of available space and its result is the optimum allocation of space to different activities (Asayesh, 2005). As the dominant rural settlements in the Guilan plain are of dispersed type, different factors determine the formation and spatial dispersion of this type of settlements: They include optimum environmental conditions, in particular, adequate water resources and their availability, The prevalence of private and family-level exploitation of water and soil resources, the prevalence of animal husbandry and ranching besides farming (Housing Foundation of Islamic Revolution, 1996), the prevalence of animal husbandry and ranching besides farming (Housing Foundation of Islamic Revolution, 1996), the prevalence of animal husbandry and ranching besides farming (Housing Foundation of Islamic Revolution, 1996) due to a relative political security (Saeedi, 1998) and availability of regional communication network (Asayesh, 2005).

The Guilan plain that occupies 35.8 percent of the province area and contains 53 percent of its all settlements (Management & Planning Organization of Guilan Province, 2001) is faced with many problems because of having dispersed rural types. The examples include servicing and its high costs, the destruction of fertile arable lands and their change to the house-making use and other uses. The lack of convenient exploitation of rural space and the decreased income of villagers are clear examples of these problems and difficulties. Accordingly, it is imperative to reform the physical structure of rural settlements of the Guilan plain in order to mitigate these problems and provide a proper condition for

the emergence of a new pattern of living in this region. As such, a desirable spatial organization for settling rural settlements in this area should appear so that a condition for optimum exploitation of environmental resources can be provided to speed up the process of socioeconomic development (Rezvani, 1996). The present study was trying to answer this question if it is possible to gather rural type in Guilan plain from the viewpoint of experts and specialists of rural development planning in Guilan Province.

Devoting attention to rural aspects of Iran and providing enough services and facilities to activate rural units are inevitable thanks to the necessity of developing activities, and especially, the activities of the first section and also for correct stabilization in the possibility of stabilizing population in different aspects and optimum organization of village space and at last sustainable development in rural regions (Asayesh & Haghzad, 2006).

The pattern of rural settlements changes between dispersed and complex. This change depends on natural environment, culture, social organization, political effects, and economic activities (Norton, 2007). The dominant type of rural settlements in the Guilan plain is dispersed (Mahdavi, 1998). The availability of felicitous conditions of natural and human environment is the most important factor in formation and spatial dispersion of this type of rural settlement. One of the problems of today's rural settlements in the Guilan plain is their fragmented physical structure that makes it necessary to have plans and arrangements to overcome the problem. Disorganization of physical structure in rural settlements of Guilan plain that is not compatible with the modern-time principles of development has posed serious problems to the provision of services and facilities such that the costs of service supply has significantly increased. Fertile farming lands are being damaged and destroyed; considerable areas of highly fertile lands have been allocated to residential centers, and overall rural space is not exploited optimally.

Therefore, the reform in of the physical structure of rural settlements of Guilan plain would lay the ground for a new living pattern in the Guilan plain to avoid damaging fertile farm

lands and to ensure the proper use of village space and finally, to regulate inhabitation per capita and allocate its surplus to farming activities or other necessary uses. Given this, a desirable spatial organization should exist for the settlement of people in this area so as to provide an optimum exploitation of environmental resources and facilities and speed up their socioeconomic development process. Thus, the gathering of rural type in Guilan plain aimed at changing their lifestyle from dispersed to semi-dispersed state in the frame of planning for physical development of rural settlements can be presented as an approach to decreasing the aforementioned problems and achieve sustainable development of village. This study seeks to examine the feasibility of collecting plain rural types to have sustainable development in rural settlements planning as a part of rural development process aiming at managing physical environment of village in a proper way. The final aim is allocation of optimum space to different activities. The main question of this research was:

Is it feasible to gather rural type in the Guilan plain for realizing sustainable rural development?

Literature review

In an article entitled "policies and procedure of planning for rural settlement examined the UK's experience? Rural settlement planning in this country from 1945 to 1980 was done in the shape of developed plans with centralized nature. It included centralizing house development to avoid dispersed and improper development, helping farmers' production enhancement, decreasing service costs, stabilizing population in rural areas and hindering their movement to cities, and improving the villagers' life quality. [Bavaghar \(1996\)](#) in his study declared that rural areas in Guilan province and especially plain rural not only are dispersed and extended but also is a dominant culture to live separately in every rural with families distant from each other. On the one hand, a considerable area of fertile farms of Guilan plain is inevitably devoted to the dispersed living space improperly and on the other hand, the costs of servicing and rural

development are increased greatly. In some cases, it has caused performing and presenting services impossible ([Bavaghar, 1996](#)).

[Molaei Hashjin \(2005\)](#) in preparing the Development Document of Rasht and Masal Townships, with regard to the restraints and limitations in developing these townships such as the problems in service supply due to the dispersed rural settlement and also changing the use of farming lands into other uses and their illegal use, suggests collecting rural settlement types in order to prevent the damages to farming land, and reduce servicing costs, and prevent environmental pollution as long-term strategies for these cities ([Molaei Hashjin, 2005](#)). [Zia \(2007\)](#) found that it is impossible to gather rural types in the plain region of Parehsar because of villagers' satisfaction with their living place and their enjoyment of facilities and economic activities of families. Therefore, it can be noticed that since this is a newly introduced topic, no study has been done at local, regional, and national levels.

MATERIALS AND METHODS

Site of study

This research was carried out in the Guilan Province plain. This area contains the flat lands covering the shoreline of Caspian Sea up to the height of 100 meters from the sea level, and the plain of Guilan with an area of 5027 km² holds 35.8 percent of total Guilan area. Geographically, this area is between 36° 56' 50" and 38° 27' 12" N. and between 48° 44' 06" and 50° 36' 43" in length E. ([Geographical Organization of Army Forces, 1993](#)). According to the spatial organization, the plain of Guilan is divided into three regions of eastern, central and western parts ([Management and Planning Organization of Guilan Province, 2006](#)), and in total, contains 1518 villages (1493 villages with some residents and 25 desolated villages). According to 2006 census (Statistical Centre of Iran), it has 243,387 families and 887,153 people and the family dimension is equal to 3.6 persons.

The present study on the feasibility of rural types gathering for sustainable development in Guilan employed a descriptive methodology.

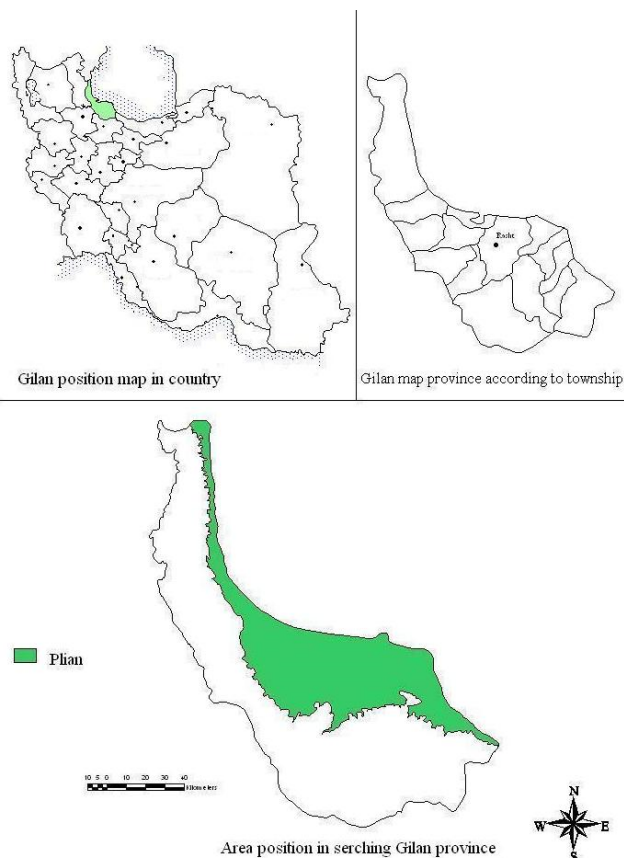


Figure 1. The location of study area

The sample population comprised experts (experts of institutions and organizations related to rural development, Master's and Ph.D. students of geography and rural planning, as well as faculty members in rural development planning). Data were collected from the documentary and field studies. After collecting the required data and extracting and classifying data derived from the experts' questionnaire, the next step was to analyze and consolidate them within the framework of research goal and finally statistics like chi-square and t-test were used for data analysis. SPSS and MS-Excel software packages were used for processing the data and drawing the diagrams and tables (Mahdavi & Taherkhani, 2006). In addition, the Arc GIS software package was used for graphic representation of information and map.

Experts' opinions about rural development planning as discussed in this research under the topic of gathering of rural types are important from different angles. Of all the questionnaires filled out by the experts, 39.6% were filled out by Master's students of geography and rural planning, 15.1% by PhD students of geography

and rural planning, and 45.3% by experts and faculty members in rural development planning.

RESULTS AND DISCUSSION

Awareness and agreement with gathering of rural types

The results showed that 96.2% of experts were familiar with gathering of rural type's plan and 3.8% were unfamiliar with it. Given the high level of familiarity of the experts with rural type gathering, the degree of familiarity of this group with this plan was 77.4% higher than the average and 22.6% were lowly familiar or unaware. Experts expressed a high level of agreement with village type gathering so that 84.9% agreed with gathering of village type and just 15.1% disagrees with it. Alleviating the problems and service costs, ensuring optimal use of rural lands, extending farming lands, enhancing villagers' income, preventing farming land use change, and also preventing villagers' migration were the most important causes of agreement, and the most important reasons of expert's disagreement with the gathering of Guilan plain villages type were the lack of exploitation from resources and wasting lands and also decreasing and solving some parts of villagers' problems and creation of other problems for them. The rate of agreement of 75.6% of experts with the gathering of plain rural types is average to high and 24.4% of them disagree with the plan or is low.

Possibility of making two or three-floor apartments in plain villages

Expert's opinion about the feasibility of the construction of two or threefloor apartments in the Guilan plain villages shows that 77.4% of experts considered it to be quite possible and 22.6% considered it impossible. In expert's views, the results for the construction of two or three-floor apartments in Guilan plain villages show that 58.5% of experts assessed its possibility to be average to high, 18.6% believed it to be low and 22.6% assessed it to be impossible.

Plain villagers' acceptance and the extend of collaboration with the gathering of plain village types

Plain villagers' acceptance of plan of gathering of village type, according to expert's idea, shows that 56.6% of experts agreed and declared that the plan of gathering of village type would be welcomed by villagers and 43.4% disagreed. Villagers' tendency and interest to live in a fairly large and extensive space, tendency to independency in the living environment, lack of tendency and villagers' agreement with the changes and transformations, lack of the culture of living in apartment settlements, lack of villagers' cooperation and collaboration, and existence of cultural obstacles were found to be the most important reasons of disagreement and rejection of the plan of gathering of rural type. Surveys on the rate of Guilan plain villagers' collaboration with gathering of rural type show that 18.9%, 7.5%, 45.3% of experts assessed it to be high, average, and low, respectively, and 28.3% of them expressed that villagers would not cooperate with this plan.

Effects of allocating large areas of living lands on decreasing the level of farming lands

Presently, one of the most important disadvantages of gathering of village type in the plain part of Guilan is the need to allocate a vast area for residential use. Available field studies in some rural areas have shown that it requires nearly 2000 m² or even more. Undoubtedly, if this process continues and large areas are allocated to residential use, the farming lands will be damaged and reduced in future. Experts' opinion about the effects of allocating large areas to living use on decreasing the area of farming lands indicates that 62.3%, 22.6%, and 11.3% of experts believed that this effect is very much, average, low respectively, and 3.8% believed in no effect.

Problems of dispersed rural types

The drawbacks of dispersed rural type in the plain part are examined as follows: lack of having services, lack of desirable use of village space, damaging and destroying farming lands, and lack of the use of spaces inside the existing structure in rural areas. Accordingly, 32.1% of

experts referred to the lack of having services, 22.6% to the lack of desirable use of rural space, 24.5% to damaging and destroying farming lands and finally 20.8% to the lack of using spaces inside the existing structure in village as the main drawback of dispersed rural type.

The extent of the effect and possible results of the gathering of dispersed types of plain rural

Survey the extent of the effect of dispersed rural type gathering in the plain part on alleviating the problems of the villages in this area and improving their stability and sustainability in long-term shows that 81.1%, 13.2% and 5.2% of experts believed that this process would be highly, moderately, and lowly effective, respectively. With respect to the possible results and effects of the plain rural type gathering in Guilan province, 37.7% referred to the decrease in servicing problems, 24.5% to desirable use of rural space, 18.9% to farming lands levels increase, 7.6% to the prevention of rural migration, 9.4% to the preservation of rural environment, and 1.9% to other choices (more security, social cooperation ...).

The extent of area allocation and the average area of living use in plain rural

Expert's opinion about the area allocated to living use in the plain rural of the Guilan province shows that 69.8%, 20.7%, and 9.4% of experts assessed this land to be high, suitable, and low, respectively. Moreover, 17%, 49.1%, 26.4%, and 5.7% of experts considered the average area of living use to be lower than 200, 200-400, 400-600, and more than 600 m², respectively. In other words, over 66% of experts asserted that the area of living use in plain rural of Guilan was lower than 400 m².

Desirable per capita dwelling in plain rural

11.3%, 45.3%, 26.4%, 3.8% 13.2%, of experts considered desirable per capita dwelling in plain rural 50, 100, 200, 300, 400 square meters and more, respectively. In other words, 56.6% know 100 square meters area and lower than it desirable per capita dwelling in plain rural.

The role of the gathering of plain village types in achieving sustainable development

The results regarding the possible role of rural type gathering in achieving sustainable rural development in plain parts of Guilan show experts' positive opinion so that 79.2% of experts agreed with and accepted it and 20.8% disagreed with it.

Practical ways and the time required for gathering of plain rural types

Experts' opinions about practical ways and the time required for gathering of plain rural types show that 22.6%, 67.9%, 9.4% of experts believed that rural type gathering would be practical through physical planning development, villagers' cooperation and collaboration, as well as governmental support and collaboration, respectively. The results of the examination of the necessary timescale horizon for carrying out plain rural type gathering revealed that 3.8%, 9.4%, and 71.7% of the experts considered it to be feasible in short-term horizon (1-2 years), in middle-term horizon (3-7 years) in long-term horizon (7-10 years), respectively.

Resolution of obstacles in gathering dispersed rural types

Resolution of obstacles of gathering plain rural types was evaluated from these perspectives: cultural and social, economic, lack of rules and regulations and other cases. As shown by the results, 49.1%, 26.4%, 15.1%, 9.4% of the experts believed that obstacles were cultural and social, economic, lack of rules and regulations, and other choices (structural, organizational,

physical-spatial), respectively. It was found that the most important obstacles in collecting dispersed rural types in Guilan were cultural and social as 49.1% experts believed. The second most important obstacle was expressed by 26.4% of experts to be the economic one resulting from low income of villagers, lack of supportive grounds, lack of government's support, etc.

Feasibility of collecting dispersed rural types

Regarding the economic, social, and cultural structure of the plain part, 73.6% and 26.4% of experts believed that the gathering of the plain rural type in Guilan would be feasible and unfeasible, respectively. The role and effect of rural type gathering on developing and flourishing farming, increasing income, and promoting villagers' lifestyle, servicing desirably, preventing villagers' migration, facilitating the development and flourishing affairs of villages in this region and, as a result, achieving sustainable rural development were the most important reasons of agreement and cases such as lack of management in constructing, charging villagers costs and expenses, and cultural problems were the most important reasons of disagreement with the plan. Therefore, this group does not assess the plan of gathering plain rural types to be appropriate for achieving sustainable rural development and they believe that the success of this plan requires correct planning, adjustment of rules and regulations, precise informing, and culture orienting among villagers.

DISCUSSION AND CONCLUSION

Based on the studies conducted on the possibility of collecting plain rural types in the plain part of

Table 1
Evaluated Indices and the Results of Testing the First Hypothesis

Population	Index	Kind of test		Percent of respondents				
		Chi ²	T	Very low	low	Medium	Much	Very Much
Experts	Experts' familiarity with village type gathering	45.3	39.3	96.2	3.8	-	-	-
	Experts' agreement with village type gathering	25.8	23.2	84.9	15.1	-	-	-
	Possibility of making living 2 or 3- story apartment	15.9	21.1	77.4	22.6	-	-	-
	Villagers' reception of Village type gathering	0.93	22.8	56.6	43.4	-	-	-
	Degree of villagers' cooperation with village type gathering	17.7	19.7	18.9	7.5	45.5	28.3	-
	Possibility of village type gathering	11.8	20.7	73.6	26.4	-	-	-

Table 2
Evaluated Indices and the Results of Testing the Second Hypothesis

Population	Index	Type of test		Percent of respondents				
		Chi ²	T	Very low	low	Medium	Much	Very Much
Experts	Disadvantageous of dispersed village type	0.96	15.7	28.3	22.6	28.3	20.7	-
	Effects of large area allocated to use	43.1	13.5	62.3	22.6	11.3	3.8	-
	Problems and difficulties of dispersed village type	1.60	14.9	32.1	22.6	24.5	20.8	-
	The degree of village type gathering effect	54.9	16.4	81.1	13.2	5.7	-	-
	Results and possible effects of village type gathering	15.0	12.4	37.7	24.5	18.9	7.6	3.11

Table 3
Evaluated Indices and the Results of Testing the Third Hypothesis

Population	Index	Type of test		Percent of respondents				
		Chi ²	T	Very low	low	Medium	Much	Very Much
Experts	The role of gathering in village Sustainable development	18.1	21.5	79.2	20.8	-	-	-
	Necessary time for practicing village type gathering	63	34.2	3.8	9.4	71.7	15.1	-
	Average living use in plain villages	20.1	19.7	17	49.1	26.4	7.5	-
	Desirable living capitation in plain villages	28.2	16.4	11.3	45.3	26.4	3.8	13.2
	Obstacles of village type gathering	19.5	13.4	49.1	26.4	5.1	9.4	-

Guilan that aimed to achieve sustainable development, different indices have been tested and expressed by villagers for accepting or rejecting the hypotheses whose results are given in Tables 1, 2 and 3.

The results of the first hypothesis done by chi² and t-statistics are as follows:

- 96.2% of the experts were informed about rural type gathering and were familiar with it.
- 84.9% of the experts agreed with plain rural type gathering in Guilan.
- 77.4% of the experts considered it feasible to build two or three-floor apartments in the plain rural.
- 56.6% of the experts believed that rural type gathering would be accepted by villagers in the plain part.
- 71.7% of the experts believed that plain villagers have already cooperated with rural type gathering; however, the amount of cooperation was average and nearly low.
- 73.6% of the experts believed that the gathering plain rural types in Guilan would be possible.

The results of the second hypothesis conducted by chi² and t-statistics are as follows:

- Shortcomings and weaknesses of dispersed rural type are too many among which the lack of giving easy services to villagers and lack of desirable use of free space with 28.3% were considered to be more severe than others.
- 62.3% of experts mentioned the effects of allocating large area for living use and its role in damaging and decreasing farming lands.
- 32.1% of experts asserted that the most important problem of dispersed rural type of Guilan plain was the lack of services.
- 81.1% of experts accepted the effect of rural type gathering on alleviating the problems and difficulties of dispersed rural type and increasing stability and constancy and introduced that their degree is high.
- Possible results and effects of rural type gathering, in experts' view, included, among all, the alleviation of servicing problems (37.7%), desirable use of village space (24.5%), and the increase in farming land level (18.9%).

The results for the third hypothesis carried out by χ^2 and t-statistics are as follows:

- 76.2% of experts agreed with the role of rural type gathering in laying the ground for sustainable rural development.
- 71.7% of experts perceived rural gathering type to be possible in long run.
- 66.1% of experts declared that the average per capita of living (the site and the super structure) in plain rural is 400 m² and lower.
- 56.6% of experts consider the desirable per capita of living for plain rural is 100 square meters and lower.
- 75.5% of experts expressed cultural and social (49.1%) and economic obstacles (26.4) as the main obstacles for plain rural type gathering.

Regarding what was presented, the results obtained about the experts' view in which several indices were evaluated and analyzed for achieving a desirable result in this research, and the hypotheses tested by χ^2 and t-statistics, it can be said that according to some indices like the level of information and level of villagers' agreement with rural type gathering and, the possibility of building two or three-floor buildings in the rural plain in Guilan and possibility of villagers' acceptance and cooperation with the plan of rural type gathering, experts' opinion toward the gathering of plain rural type in Guilan is positive (see Table 1). Based on the role of the gathering of plain rural type, the disadvantages, problems and difficulties like lack of easy servicing to villages and villagers, lack of desirable use of rural space, damaging fertile farming lands and also decreasing the costs of servicing and accelerating and speeding the process of giving it to villagers and the possible results and effects of rural type gathering that cause the stability and constancy of these villages are unavoidable and acceptable according to the studied indices in experts' views (see Table 2). Accordingly, it can be argued that village gathering type plays a basic long-term role in alleviating the problems, difficulties, and servicing costs to villages and speeding up in usage of villagers of the Guilan plain. According to the results about experts'

opinions on the possibility of rural type gathering and its role in alleviating the problems and difficulties of rural areas in Guilan plain, rural type gathering through decreasing per capita living and attending to average living use (the site and super structure) face some problems and obstacles such as cultural, social and economic obstacles and problems and lack of rules and regulations for its implementation. But, since it is practical in long run, it may have a significant role in sustainable development of rural areas in plain part of Guilan (Table 3).

RECOMMENDATIONS

- Increasing villagers' knowledge in plain part about the advantages of changing living methods from a dispersed to a semi-dispersed state (rural type gathering) and disadvantages of dispersed rural type.
- Providing motives for active cooperation in the implementation of the plan of rural type gathering.
- Using planning experts and specialists in rural development in different steps and aspects of the plan like preparing and collecting rules and regulations, as well as the method of implementation.
- Cooperation of the organizations and related institutions in the process of implementation of rural type gathering that have a role in developing and flourishing rural regions like Islamic Republic of Iran Housing Foundation, Agricultural Organization, and Governor General Office.
- Accelerating the process of granting long-term low-interest bank facilities to villagers (loans for renewing rural houses)
- Governmental support for sustainable development plans of rural areas (rural type gathering) in decreasing problems and difficulties of dispersed rural types and increasing their stability and constancy.
- Placing the plan of rural type gathering of the plain part in the development documents of Guilan's cities regarding the policies of preventing damages to fertile farming lands and decreasing their surface under plantation and preserving rural areas' environment in plain part.

REFERENCES

- Asayesh, H. (2005). *Physical planning of rural dwellings*. Islamic Azad University, Tehran, Research and Science Branch Tehran, Iran.
- Asayesh, H., & Haghzad, A. (2006). *Macro policies and goals of rural development in Iran in 1400 horizon*. The first conference of geography and the 21st century, (26-28 April, Pp. 333-344), Esfahan, Islamic Azad University, Najafabad Branch, Iran.
- Bavaghar, I. (1996). *The Reason of Creation of Dispersed rural in Guilan forests and the way of collecting them*. Gathering of Articles in seminar on settlement of dispersed rural (5 November), Hamadan, Housing Foundation of Islamic Revolution, Iran.
- Geographical Organization of Army Forces. (1993). Topographical Map of Guilan. Scale: 1:50000.
- Housing Foundation of Islamic Revolution. (1996). The way of inhabiting and typification of rural houses in earthquake stricken regions of Guilan and Zanjan, Tehran.
- Mahdavi, M. (1998). *An Introduction to Rural Geography in Iran*. Tehran, Samt Publications, 1st Volume.
- Management and Planning Organization of Guilan Province (2006). *Guilan Province of Map political*. Rasht: Management and Planning Organization of Guilan Province.
- Molaei Hashjin, N. (2002). An analysis on the application of geography on planning physical development of village dwellings in Iran. *Geographical Space Journal*, 6, 49-66.
- Molaei Hashjin, N. (2005). *Development Document of Rasht Township*. Rasht: Management and Planning Organization of Guilan Province.
- Molaei Hashjin, N. (2005). *Development Document of Masal Township*. Rasht: Management and Planning Organization of Guilan Province.
- Norton, W. (2007). *Human Geography*. Oxford University Press. ISBN-13:9780199019557.
- Rezvani, M.R. (1996). Policies and Methods of Planning Rural settlement (experienced in England). Gathering of Articles in Seminar on Settlement of Dispersed rural, Hamadan, Housing Foundation of Islamic Revolution.
- Saeedi, A. (1998). *Principles of Rural Geography*. Tehran, Samt Publications.
- Statistical Centre of Iran (2006). Guilan Statistical Yearbook. Retrieved from <https://www.amar.org.ir/english/>
- Zia, E. (2007). Comparative Examination of Spatial-physical Plain and Mountainous Villages with an Emphasis on Measuring the Possibility of Measuring the Gathering of Village Types. Case Study in Parehsar District of Rezvanshahr Township. M.A Thesis, Islamic Azad University, Rasht.

How to cite this article:

Molaei Hashjin, N., & Pourramzan, E. (2017). Feasibility of plain rural type gathering towards sustainable development in Guilan Province, Iran. *International Journal of Agricultural Management and Development*, 7(4), 525-533.

URL: