

## The Effects of Land use Location on Rural Construction in Bojnourd County

Aliakbar Anabestani\*<sup>1</sup> – Lida Moghadasi<sup>2</sup>

1- Associate Prof., in Geography & Rural Planning, Ferdowsi University of Mashhad, Mashhad, Iran.

2- MSc., in Geography & Rural Planning, Ferdowsi University of Mashhad, Mashhad, Iran.

Received: 20 December 2014

Accepted: 15 March 2015

### Extended Abstract

#### 1. INTRODUCTION

Allocating land to different uses in a village is done after assessing the various amounts of land required. At this stage, locating the various land uses, taking into account the proper and effective use of land, is of paramount importance and villages of Bojnourd County are no exception. Among the various abnormalities that are discernible in the settlements of this County are lack of awareness regarding the significance of land locating and its role in the development and construction of rural settlements and the various aspects involved in the process of land locating. Paying attention to the important role of land-locating and evaluating its various aspects more deeply can lead to a better use of land, increased efficiency in rural plans and higher satisfaction among people. To this end, the main question that the present research seeks to answer concerns the extent to which effective land-locating for proposed land uses in rural plans can provide the proper basis for the development and construction of rural settlements.

#### 2. THEORETICAL FRAMEWORK

Land use, in guide plans, refers to the sort of land-cover and land occupation by various human activities in the physical or the constructed and residential texture in a village. Among the various land-uses in the rural texture residential, commercial, industrial, religious, green space, husbandry and etc. can be named. Unfortunately, the classifications of rural land-use are, to a large extent, adopted from civil studies which are sometimes modified as consultants deem fit. Moreover, there is a huge inconsistency in categorizing various land-uses in guide plans which leads to unrealistic land use per capita in status quo. inconsistencies in classification of land-use in rural guide plans deprives us of the ability to compare periodic changes in land use of one village with that of another. Thus, it is important to

create a proper standard to categorize land use information in rural guide plans.

#### 3. METHODOLOGY

The adopted methodology for the present research, based on the practical purpose and its nature, is analytical-descriptive. The theoretical frameworks are based on document and library studies. Questionnaires were also given to thirty officials of the housing foundation of Bojnourd County and executive managers of the aforementioned villages, in person. In order to evaluate the effects of land-locating on development and construction of villages, twenty-three indices in economics, physical, social, environmental aspects of villagers' life were used. Likert-scale was used to rate and evaluate these indices. In the next stage, using factor analysis, a method of optimizing the measured items, based on the relationship between variables and scales, which are in fact the means of assessment, and taking into account the quality of the questionnaire results, which cover a wide range of diverse topics, the factors were reduced to 8 main factors and their criterion.

#### 4. DISCUSSION

The findings of the research shows that environmental opportunities (development in line with facilities and limitations, observing moderation, improving the quality of rural textures and preventing land degradation) with an eigenvalue of (2.533) and percentage of variance of eigenvalue (11.02) counts as the most important factor of land-locating in development of Bojnourd county villages. After that welfare and hope in the future (chances of future development, increasing facilities and general satisfaction, conserving the resources, and approaching the indices of sustainable development) with a percentage of variance of eigenvalue of (9.316) is the second factor. Social factor (creating more welfare) had the least effect and took the 8th place, with a percentage of variance of eigenvalue of (5.252).

\*. Corresponding Author: anabestani@um.ac.ir

Tel: +989155719016

Overall, the investigated factors accounted for (64.726) percent of variance of eigenvalue among the overall variance of land-locating's effect on rural development and construction. The remaining (35.274) percent, is due to factors not investigated in the present research. The regression model with  $F=47.75$  to  $F=249.16$  and a significance level of ( $\text{sig}=0.000$ ) was statistically highly significant. Initially the economic-physical effect's variable carries an explanatory effect of 62.9 percent (adjusted  $R^2$  0.629) of the dependent variable of rural construction and development and gradually, by adding other factors, the explanatory effect of the dependent variable increases; however, in the 6th stage, after adding the profitability variable, the regression models is no longer significant. Thus the profitability, physical and economic variables are of no significance in the model and the five variables account for an explanatory effect of (0.981) in changes of the dependent variable.

## 5. CONCLUSION

The findings of the research indicate that in order to find an answer to the question of the extent to which effective land-locating for proposed land uses in rural plans can provide the proper basis for the development and construction of rural

settlements, the eight factors of environmental, welfare and hope in the future, efficiency, physical, economic, profitability, usage congruity and social, which were obtained through questionnaires given to senior experts and rural managers in the 7 studied villages of Bojnourd county, explain 64.7 percent of all variances. Among the factors affecting rural development and construction, the highest impact factor belonged to villagers' welfare and comfort with 0.404, congruity of land-use with 0.38 and rural sustainable development with 0.226, according to standardized beta obtained from stepwise regression. In addition, for comparing the views of experts and rural managers with regards to the effects of locating land use on rural development and construction, between groups analyses and Tukey's post hoc analysis were used. The results of the latter analysis indicates that there is no significant difference between experts and rural managers concerning the effects of locating proposed land-uses on rural development and construction, confirming the research hypothesis.

**Keyword:** Locating, physical, social, sustainable development, profitability, Bojnourd.

## References

1. Anabestani, A. A. & Akbari, M. H. (2012). Evaluation of guidance plans and their role in the village physical development from villagers perspective (Case study: Jahrom County). *Journal of Human Geography Research*, 44(4), 93-110. [In Persian]
2. Anabestani, A. A. & Javanshiri, M. (2013). Locating with the aim of suitable developing of physical texture in rural settlements (Case study: Villages of Khaf County). *Journal of Research and Rural Planning*, 2(3), 233-256. [In Persian]
3. Anabestani, A. A. & Javanshiri, M. (2014a). *The technique and model of locating of land use in rural settlements*. Tehran: Parham Naghsh Publication. [In Persian]
4. Anabestani, A. A. & Javanshiri, M. (2014b). *Physical planning of rural settlements in Iran*. Bojnourd: Jahani Publication. [In Persian]
5. Anabestani, A. A. (2014). *Application of GIS in regional and rural planning*. Tehran: Parham Naghsh Publication. [In Persian]
6. Awuah, K. G. B., Hammond, F. N., Lamond, J. E., & Booth, C. (2014). Benefits of urban land use planning in Ghana. *Geoforum*, 51(1), 37-46.
7. Azizpoor, F., Khalili, A., Mohsenzadeh, A. & Hoseini-e-Hasel, S. (2011). Analysis and evaluation of the economic effects of execution rural guidance plan in the country's rural settlements. *Journal of Housing and Rural Environment*, 31(136), 71-84. [In Persian]
8. Bicen, H., & Özdamlı, F. (2011). Validating the instrument of web based collaborative learning competences using factor analysis. *Procedia-Social and Behavioral Sciences*, 15(1), 3921-3926.
9. Cano, M., Garzon, E., & Sanchez-Soto, P. J. (2013). Historic preservation, GIS, & rural development: The case of Almería province, Spain. *Applied Geography*, 42(1), 34-47.
10. Dehestani-e-Ardakani, N., Taj, Sh., Sarkargar-e-Ardakani, A. & Asadian, F. (2011). *Optimum locating of rural service centers with using remote sensing and GIS, (Case study: Aghda Dehestan)*. Paper presented at the Proceedings of the National Congress of Geomatics, Tehran, Iran. [In Persian]

11. Estelaji, A. R. & Yordkhani, M. (2010). The status of spatial planning for urban and rural settlements. *Journal of Human Geography Researches*, 2(4), 154-165. [In Persian]
12. Gaskin, C. J., & Happell, B. (2014). On exploratory factor analysis: A review of recent evidence, an assessment of current practice, and recommendations for future use. *International Journal of Nursing Studies*, 51(3), 511-521.
13. Ghasemi, N. & Gandomkar, A. (2013). The survey of physical elements in pleasure flight sites of Isfahan Province using geographic positioning system GIS. *Journal of Regional Planning*, 3(10), 97-106. [In Persian]
14. Gharakhlu, M., Davoodi, M., Zandavi, S. M. & Jorjani, H. A. (2011). Locate the optimal areas of physical developing Babolsar city, on the basis of natural indicators. *Journal of Geography and Development*, 9(23), 22-39. [In Persian]
15. Governor of North Khorasan. (2014). *Last divisions of Bojnurd County*. Bojnurd: Governor of North Khorasan. [In Persian]
16. Housing Foundation of Islamic Revolution. (2007). *Rural land use studies*. Tehran: Sharif Publication. [In Persian]
17. Kiavarz-e-Moghadam, H. & Kiavarz-e-Moghadam, M. (2011). Locate cultural centres using spatial information systems. *Journal of Surveying and Spatial Information*, 2(2), 1-5. [In Persian]
18. Makhfi, G., Roniasi, N., Sobhan-e-Ardakani, S. & Balbanian, A. A. (2012). Locate of areas prone to development of tourism in Hamedan County. *Journal of Geography and Environmental Studies*, 1(2), 79-94. [In Persian]
19. Moshiri, M. & Saeedi, A. (2010). *The patterns and methods of preparation of rural land*. Tehran: HFIR Publication. [In Persian]
20. Naghavi, M. R., & Purtaheri, M. (2011). Physical development of rural settlements with the approach of sustainable development. *Journal of Housing and Rural Environment*, 31(73), 53-70. [In Persian]
21. North Khorasan Agriculture Organization. (2013). *Demographics of Bojnurd County*. Retrieved 16 June 2014 from <http://bojnourd.nkj.ir/?partid=5489&indexid=130>. [In Persian]
22. Razvian, M. T. (2002). *Urban land use planning*. (1<sup>st</sup> Ed.). Tehran: Monshi Publication. [In Persian]
23. Rezvani, M. R. (2011). *Rural development planning in Iran*. (4<sup>th</sup> Ed.). Qomes Publication.
24. Rosatmi, Sh. B. & Mirzaali, M. (2013). Location analysis of land use in rural guidance plans of Gonbad-e-Kavoos County. *Journal of Space Economy and Rural Development*, 2(4), 93-118. [In Persian]
25. Rural Civil Affairs. (2013). *Performance of the study and implementation of rural guidance plans in country*. Retrieved 15 August 2014 from <http://www.bonyadmaskan.ir>. [In Persian]
26. Saeedi, A. (2008). Some of the location of rural settlements factors. *Journal of Housing & Rural Environment*, 29(124), 2-11. [In Persian]
27. Sajadi, J. & Parsipur, H. (2013). The survey of housing location and its effects on the urban development patterns (Case study: Bojnurd County). *Journal of Geographical Planning of Space*, 3(7), 87-101. [In Persian]
28. Saleh, K., Elena, S., & Khalil, H. M. (2014). Egyptian research for agriculture rural development today. *Procedia Economics and Finance*, 8(1), 683-687.
29. Sartipipour, M. (2000). *The evaluation of rural Guidance Plan production*. Tehran: HFIR Publication. [In Persian]
30. Sartipipour, M. (2008). *Urban and rural management encyclopedia*. Tehran: Iranian Dehyariha and Municipalities Organization. [In Persian]
31. Shahbazi, A. (2010). *Income on rural development pathology*. Tehran: Shahid Beheshti University Press. [In Persian]
32. Sharifi, B., Maroofi, A. & Soorani, A. (2012). *Locating of urban green spaces with AHP model and geography information system (GIS) (Case study: Oshnaviye city)*. Paper presented at the Proceedings of the First Regional Conference on Architecture and Urbanism, Tehran, Iran. [In Persian]
33. Zareei, Y. (2009). Cash on rural guidance plan procurement process. *Journal of Housing & Rural Environment*, 29(127), 56-65. [In Persian]

**How to cite this article:**

Anabestani, A. A. & Moghadasi, L. (2015). The effects of land use location on rural construction in Bojnourd County. *Journal of Research & Rural Planning*, 4(2), 173-185.

URL <http://jrpp.um.ac.ir/index.php/RRP/article/view/42538>

ISSN: 2322-2514

eISSN: 2383-2495

