

Evaluation of the factors affecting formation of abandoned lands in Ilam city to achieve urban sustainability

Maryam Rezaee^{1*}, Isa Ebrahimzadeh², Mojtaba Rafiean³

1. PhD student of Geography and Urban planning, Sistan and Balochestan University, Iran

2. Professor of Geography and Urban planning, Sistan and Balochestan University, Iran

3. Associate Professor of Urban Planning, Tarbiat Modarress University, Iran

Received: 11 May 2015 Accepted: 25 June 2016

Extended abstract

Introduction

Given that the land is the most important source in urban areas, it plays a key role in the success or failure of urban development projects. A significant factor in success of the plans for housing, infrastructures, equipment, and generally, favorable development of urban areas depends on timely and adequate access to the land and its competent management. Therefore, an optimal utilization of land to ensure economic efficiency, social justice, and environmental protection is urban sustainable development.

Nowadays, one of the problems that the city and citizens are encountered with is the abandoned and unused lands in various areas and districts of a city. These problematic urban areas and spaces can lead to instability in terms of environmental, social and economic conditions. Also, this makes serious challenges for the urban environments. Due to important and critical role of these lands in urban development and strategic plans progressing, it is necessary to control the lands. To manage and handle the abandoned lands, the first step is to identify the factors that are effective on their formation.

Ilam city as one of the growing middle cities of the country has some unused lands. This has faced this city with the problem of urban land abandonment and urban sprawl and significant horizontal development. Other factors such as war and consequent migration from other parts of the province, especially in the border cities of Mehran and Dehloranin, to this city have also affected this problem. Therefore, the main objective of this paper is to identify and evaluate the factors and elements creating the abandoned and unused lands in Ilam city. Hence, the main question raised in this research is that what factors and forces have led to the abandoned lands in the city of Ilam.

Methodology

This study is an applied research in terms of purpose and its methodology is analytic-descriptive. For collecting the data, the library and survey method were used. By specifying the

* Corresponding Author: m.rezaee842@gmail.com, Tel: +98 9181431288

related parameters and variables, the questions of questionnaire were prepared and distributed among the samples of this research. The population of this study includes experts in land and housing in the Ilam city. The study population was divided into three main parts including the public sector, the private sector and the professional groups. The total number of expert of land and housing (the sum of the related groups) in Ilam was 1649 people. Using Cochran sampling method with standard division of 5% and a confidence coefficient of 95%, a sample of 311 people out of the total population was estimated. To select the samples, we also used stratified sampling method. In this study, any of the three groups (public sector, private sector and professional groups) were considered as the studied classes. The sampling method for all of the classes was simple random sampling. Then, for data analysis, testing methods such as Pearson correlation coefficient, T test, as well as simple and multiple regressions were employed by SPSS software.

Results and Discussion

In this research, effective factors and forces on the formation of abandoned lands were examined from 5 viewpoints including economic, socio-cultural, legal, political, and environmental aspects.

There are some variables related to the economic indicators in this study. One of the most important of the indicators is the land speculation with some factors such as abandoned lands for increasing the price, the role of estate agents and the brokers, the liquidity growth and the flow of wander money to the urban land market, the role of banks and financial and credit institutions, granting huge loans and its use in the purchase and sale of land. Other economic indicators are the reduction of effective demand for land and housing market due to too expensive land price, the land auctions from various institutions of government, lack of adequate resources and equipment such as funds in municipalities and executive agencies for applying the detailed and comprehensive plans.

The results of Pearson correlation test between two variables of economic factors and the amount of abandoned lands show that there is a significant relationship between the economic factors and forces as independent variables and the dependent variable of abandoned Lands (with a correlation coefficient of 0.441). This means that whenever the economic forces are increased in intensity, the intensity of abandoned lands will be enhanced with the same rate. Thus, based on the results obtained, the null hypothesis is rejected.

The investigated legal factors and forces in the abandoned lands are included in the joint ownership, inherited properties, the lack of official document, the urban strict rules, as well as a mismatch between the land price and the density and type of authorized users. The results of the test of relation between the legal forces and the intensity of abandoned lands within the city indicate that they have a significant relationship with correlation coefficient of 0.434. Therefore, the null hypothesis (The lack of correlation between these two variables) is rejected and it is approved that there is a relationship between the law forces and the intensity of urban abandoned lands.

Moreover, the obtained results show that the environmental, social and political factors and forces, each with different degrees have influenced the intensity of abandoned lands in the study area. This reveals a significant positive correlation between the mentioned factors and the intensity of abandoned lands.

According to the results of data analysis using single-sample T-test, Pearson correlation coefficient test and also multivariate regression analysis, the influence of the factors and forces (economic, legal, environmental, socio-cultural and political) on the abandoned lands in the Ilam city was determined.

Conclusion

The procedure of physical development of Ilam in different periods shows that there has existed no pattern and program for the correct use of land, as well as no guidance for the city development. Hence, the expansion of the city has been horizontal in one or two floors or more

which is recently diffracted. The constructions in the most periods, especially in 1980s have been as patchiness, scattered and disordered parts. Despite determining the legal limit for the city until the 1920, in practice, this limitation has not been considered and a great deal of the city expansion has been located outside this limitation. All of these issues show the sporadic pattern of Ilam city and a sharp increase in the city expansion at any period which has caused an increase in the abandoned lands in this city.

This matter had been the result of different factors arising from the circumstances of each period. The factors including migrations due to the imposed war and migrations from villages to cities, policies of land and housing assignment, miscalculation of urban plans, land speculation and the prominent role of speculators in this matter and etc. have affected the formation of horizontal pattern of the city and the abandoned lands. The physical development of Ilam city has been very rapid, so that in 1956, the expansion of this city had been only 89 hectares. But after this decade, especially since 1976, the horizontal growth had been intensified. All the above factors indicate that the formation of urban abandoned lands as well as the horizontal and unplanned development of city has caused instability in Ilam city from the viewpoints of environmental, economic and social aspects. Consequently, the urban life has been threatened. Many officials and experts in Ilam city believe that if the government provides necessary infrastructures in the western half of the city of Ilam (areas 3 and 4) with low population density. The land price could be closed to the actual one and the real estate situation will be stabilized. This suggests that if the urban land is used and managed properly and there is no need to its physical development up to the next few decades and a sustainable urban form is accessible.

Keywords: abandoned lands, Ilam City, urban land, urban sustainability.

References

1. Abbaszadegan, M. & Rostam Yazdi, B. (2008). Application of Smart Growth Strategies to Tackle the Effects of Urban Sprawl, *Journal of Technology of Education*, Issue 1.
2. Amiri, A. (2007). The role of land management in Small Cities Development, Case Study: City of Ardekan in Fars, MA thesis, Shiraz University, Faculty of Arts and Architecture.
3. Athari, k. (2000). In the direction the effectiveness of government intervention in the urban land market, housing economy quarterly, No. 30, National Organization of Land and Housing.
4. Azar, A. & Momeni, M. (2009). Statistics and its application in management, V2, SAMT publication, Tehran.
5. Azizi, M.M. (1999). Urban land and government intervention, *Abadi Quarterly*, No 33, pp. 22-30.
6. Barakpour, N. & Bahrami, S. (2011). A Feasibility Study of Redevelopment in Urban Inefficient Textures (A case study: Anbar-e Naft Quarter, Zone 11, Tehran), *Journal of Studies on Iranian-Islamic City*, No 4, pp. 1-14.
7. Briassoulis, H. (1999). Analysis of land use change: theoretical and modeling approaches, ph.D. Department of Geography University of the Aegean Lesvos, Greece.
8. Consulting Engineers of bod Technique. (2013). Report of Master Plan of Ilam, general Directorate of Roads and Urbanism of Ilam province.
9. Encyclopedia of the city. (2005). Edit by Ragger w. Cave/ Rutledge Taylor & Francis group/ London & New York.

10. Heidarzadeh, M.H. Jafari Varamini, A.H. & Khoshnam, H. (2008). the assessment of environmental impact of urban projects, an approach towards sustainable urban development, 6nd Symposium of Iranian Society of Environmentalists.
11. Kalberer, A. (2005). The future lies on Brownfield, Federal Environmental Agency, Dessau, 40.
12. Khatami, S. Y. & Molaei. A. (2012). The survey of different approaches on the sustainable use of land, the second conference of environmental planning and management (EPM), Tehran University, 15-16 May.
13. Kukabi, A. (2006). Change in The concept and paradigm of land use planning, No15&16, pp. 25-35.
14. Mahmoudi Pati, F. & Mohammad pour omran, M. (2008). Urban land management policies, Strategies for achieving of low-income classes to urban land, Tehran, shahidi press.
15. Mahdizadeh, j. (2006). Strategic planning of urban development (Recent Global experiences and its place in Iran), publication of Ministry of Housing and Urban Development.
16. Majedi, H. (1999). Land, the main issue of urban development, Abadi Journal, Issue 33, Studies and Research Center of Urban Development and Architecture of Iran, Tehran.
17. Mashayekh, H. (2000). Urban land and development management, Proceedings of Congress the land and urban development, Studies and Research Center of Urbanism and Architecture of Iran, Tehran.
18. Meshkini, A. Zanganeh, A. & Mahdnazhad, H. (2014). Introduction on sprawl (creep) Urban, Publication of University of Khwarizmi.
19. McCarthy, L. (2002). The Brownfield Dual-Use Policy Challenge: Reducing Barriers to Private Redevelopment While Connecting Reuse to Broader Community Goals, Land use policy, No. 19, Issue 4, pp. 287-296.
20. Moshiri, S. R. & Maleki Nezam Abad, R. (2011). An analysis of land use planning with an emphasis on sustainable urban development (Case Study: Miandoab City), Journal of Encyclopedia of Geography, Issue 82.
21. Motamedi, M. (2002). Land and its place in urban development, municipalities Journal, No 37, pp. 13-19.
22. Momeni, M. & faal ghayomi, A. (2012). Statistical analysis using SPSS, gange shaygan press.
23. Nastaran, M, Izadi, A. & Matloobi, F. (2013). Analysis of the physical and social dimensions of smart growth in Isfahan city, Journal of Art Research, Isfahan Art University, No 5. Pp. 17-30.
24. Naghibzadeh, A.R. (2003). Abandoned lands management, (case study: City Shiraz), MA thesis in urbanism, Shiraz University
25. Naghibzadeh, A.R. (2004). Effect of abandoned lands in urban development, Proceedings of Conference of Urbanism of Iran, Faculty of Art and Architecture of Shiraz University.
26. Necha Sungena, T. Serbeh-Yiadom, K. & Asfaw, M. (2014). Strengthening Good Governance in Urban Land Management in Ethiopia: A Case-study of Hawassa, Environment and Earth Science, Vol.4, No.15, PP. 96-107.
27. Norozi, S. & Alalhesabi, M. (2011). Sustainable urban development based on sustainable regeneration of recycled lands, National Conference on Sustainable Development and Urban Construction, Daneshpajooan Institute of Higher Education, Esfahan. Iran, November.
28. Pour Mohammadi, M.R. & Taghi Pour, A.A. (2012). Resumption of Urban Brownfields, NO. 42, pp. 65-88.
29. Rahnama, M. R, Abbas Zadeh, Gh.R. (2008). Principles, Foundations and models of the city's physical form measurement, Academic Center for Education, Culture and Research (ACECR) press, Mashhad.

30. Rennie Short, J. (2009). Urban Theory: A Critical Assessment, Translated by Ziari, K. Mahdnejad, H. parhiz, F. Tehran: Tehran University press.
31. Saraei, M.H. (2010). Investigation of Causes of Residential Lands abandonment in Yazd City. Journal of Urban - Regional Studies and Research, Vo 1, No 3, pp 43-70
32. Shamsi, kh. & Nassiri, M. (2013). The survey of environmental consequences of urban sprawl with emphasis on sustainable development, The first national conference on environmental research, Hamadan, Shahid Mofateh Faculty, 31 October.
33. Subooti, H. & Alavi, P. (2012). Environmental impact of abandoned fabrics, the second conference of environmental planning and management (EPM), Tehran University, 15-16 May.
34. Thornton, G, Franz, M, Edward, D, Pahlen, G. & Nathaniel, P. (2007). The challenge of sustainability: incentives for brownfield regeneration in Europe, Environmental Science & Policy, Volume 10, Issue 2, PP. 116–134.
35. Yakubousky, R. (1997). Infill Development Strategies for Shaping Livable Neighborhoods. Municipal Research & Services Center of Washington, June, No.38.
36. Zanganeh Shahraki, S. (2011). Analysis the Socio- Economic and Environmental Impacts of Urban Sprawl and How to Apply Urban Smart Growth Policies, the Case of Yazd City in Iran, PhDthesis in Geography and Urban Planning, University of Tehran, Faculty of Geography.

Archive of SID