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The Investigation of Housing Pattern Changes Effect on Village-towns (Case Study: Village-town of Mohammad Abad of Zabol City)

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Introduction

Housing is considered as one of the smallest parts of the settlements. It can be a simple windward, an alcove or a simple cottage. Housing is initiated into human needs and can be considered as one of the geographical phenomena of a region (Bashiri et al., 2000: 2). In other words, housing is a capital goods and a social value, which can decrease social hurts and make sustainability of a society (Dix, 1985, 1-10).

Therefore, changing of building pattern and structure of housings is affected by international issues and phenomena, changing in customs and life styles of the residents. Thus, in different periods of history evolution of human society, household structure evolution, emergence of complicated human societies in form village and city and other evolution of man has inevitably created new housings patterns as a result of technology development, population growth, moral and intellectual

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development and also emergence of faithfulness and semantic (Fazeli, 1386, 33). In fact, before changing of new methods of housing building, rural housings have been a symbol of vital and living of rural residents and, effective environmental factors and forces and also effective social-economic trends have been formed their structures (Motiyi, 1382, 100).

Based on above description, an important question arise: what changes do we see in housing structure patterns and what are its consequence?

Therefore, the present study is aimed at analyzing negative and positive effects of housing changing patterns to focus on solidification and aesthetic aspects in housing building according to climatic conditions as previous.

Materials and Methods

The methodology of the present study is descriptive-analytical, which contain two main parts. The superficial and content validity of the questionnaire was confirmed by related experts. Its reliability also was calculated by Chronbakh Alpha (0.79). The population includes all of rural-urban households of Mohammadabad. Based on the survey of 2011, this region households have been around 3444. Sampling was done by Cochran method, which was calculated 348 households at confidence level of 95 percent. In the next step, collected data were analyzed by using SPSS software and Pearson, Chi-Square and Wilcoxon tests to answer the research questions.

Results and Discussion

To test the first hypothesis of the research (there is a significance relationship between lack of recreational, conveniences spaces and tendency to changes in local housing structure) Chi-Square test was used. The main variable of this hypothesis is lack of facilities, which was calculated by compartment such as enjoyment of

bathroom, parking, bedroom, lack of sufficient light, large area of yard and area of building. Average of lack of conveniences spaces includes: enjoyment of bathroom 2.98%, parking 2.87, bedroom 3.16, lack of sufficient light 3.26, large area of yard and lack of building area was calculated around 2.76. According to calculated average we can conclude that the region suffer more than average from lack of conveniences spaces. So, these lacks is a sign of local people tendency to new patterns of housing. In addition, the results of Chi-Square (significance level of less than 0.05) indicates that local people suffer from lack of all indices.

To test the second hypothesis of the research (there is a relationship between the quality of materials used in rural housings before and after changing into city-village), Wilcoxon test was used, due to its capability in testing of difference among orders. The results of this test indicate that 301 person (86.5%) of respondents answered that the quality of buildings and the materials of the building has improved after changing the housing structure patterns. 3 persons (0.86%) of respondents answered that the situation of building quality and building materials was equal after and before of changing housing structure patterns. So, almost all of the respondents (86.5%) maintain that changing of housing structure patterns has affected on improvement of buildings quality and their housing materials. The Z statistics with a score of -7.312 and significant level of 0.000 confirm this matter. Based on this result, research hypothesis was confirmed.

To test third hypothesis of the research (the situation of energy maintenance in the building and texture of housing new patterns in rural-urban region of Mohammad Abad was different than past), variables such as oil consumption, number of gas capsule used in a month, usage of electricity per household and usage of water per household were used.

Based on the research results, in old housings, average of used capsule was 2.3 each month. In new housings it has increased to 3.45 capsule. In addition, amount of oil consumption in old housings was 2.1 barrel, which has increased to 3.65 barrel.

Furthermore, air conditioner in old housing at hot seasons was active an average of 10.14 hours and maximum of 21 hours. At cold seasons, hot system was active an average of 9.76 hours and maximum of 19 hours. In new housing, in hot seasons this amount was an average of around 14.53 hours and maximum of 22 hours. In cold seasons, hot system was active an average of 13.09 hours and maximum of 21 hours. For testing research hypothesis, Pearson test was used. The results of this test indicate that H_0 (there is a significant relationship between changing of housing structure pattern and region climate conditions) is rejected (Pearson Correlation of 0.601 and significance level of 0.05). In other side, the opposite hypothesis (there isn't a significant relationship between changing of housing structure pattern and region climate conditions) is confirmed.

Conclusions

Every geographical region has a special climatic conditions, which can distinguish that region to others. So, in any region, housing structure is necessitated in its special pattern. So, copying of patterns from other regions can increase usage of non-renewable energies, which can make environmental pollutions and an extra economic burden. In addition, consistency of housing with environmental conditions can make convenience for local people. If in the region of Mohammad Abad, old housings structure was based on the culture, tradition and local people economic, it would decrease energy usage dramatically for heating and cooling of building space. Gradually, housing structure improved and it decreased solidity and beauty of new housings. In other side, inconsistency of used materials to climatic conditions can

increase energy usage for heating and cooling and also increasing of energy for producing new materials, which can pollute environment at the phase of building.

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