

## The role of rural housing retrofitting in improving the physical quality of rural areas (The Case study: Quchan Atiq village)

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### Abstract

One of the most important needs of rural development is rural housing. The construction of rural resistant housing and providing appropriate houses for villager has often been important elements of various development programs. Retrofitting means increasing the resistance of a structure (building) against the forces and improving the condition of the texture and internal elements of the housing and includes a set of measures that increase the life and strength of the building with small changes in the structure. This study attempts to investigate the effects of retrofitting the houses on physical quality of rural ancient Ghochan Atigh County. This study seeks to answer this question, what is the relationship between retrofitting the rural houses, and physical stability and the quality of housing area of the study? This study is functional and descriptive-analytical methods are used. Information and required data were collected by means of library and field methods. To analyze the data, quantitative methods were used in the form of descriptive and inferential statistics (One samples T test, Wilcoxon and Pearson). The area under study consists of 46 villages, which 15 villages were selected as sample. The Number of required samples to complete the questionnaire were determined 150 household by using a modified Cochran formula and questionnaires were distributed in the form of quota sampling in the villages of rural area. The results of the study indicate that there is a significant relationship between Retrofitting rural housing and physical stability in the area of the study with a confidence level of 99% at a rate 0.277 and the quality of housing at a rate 0.262, and a significant difference has been observed in the periods before and after retrofitting to improve the quality of housing and physical stability in the study in the area of study. Retrofitting rural housing while increasing the strength and reducing its vulnerability to natural hazards; Improvement of the physical quality in rural areas has been followed in the study area.

**Keywords:** Vulnerability, Rural housing, Physical quality, Quchan County.

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