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**The Thesis Submitted for the master's degree
(in the field of Geography and Urban Planning, Urban)**

**Analysis of physical resilience of worn-out urban tissues against earthquakes
(Case study: Shirabad district of Zahedan city)**

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Abstract

Nowadays, due to various urban crises and damages, including earthquakes, the study of resilience against earthquakes has become important. The aim of the present research is to analyze the physical resilience of Shirabad region of Zahedan against earthquakes. In this regard, the current research method is descriptive-analytical-comparative, and in order to calculate the resilience of this region, the average of the optimal limit method has been used, and by reviewing various studies, the indicators and their optimal limit have been updated, then to determine the numerical value of the indicators of social dimensions, economic and physical, library information and statistics of relevant organizations and observation have been used, and to determine the numerical value of institutional resilience dimensions, a questionnaire was designed and distributed among 384 people based on Cochran's formula, and its confidence coefficient was 95% . Cronbach's alpha coefficient for 35 sample questionnaires was 0.934, which indicates its high reliability, and the validity of the questionnaires was also checked using the content analysis method. According to the findings of this research, and according to the optimal number of 1, among the different dimensions of resilience, none of the dimensions are resilient; Meanwhile, the economic dimension is more resilient (0.82), which can be mainly due to the lack of large-scale business centers, and then the institutional (0.81), social (0.73) and physical dimensions (0.72) are more resilient; This is despite the fact that none of these dimensions are resilient, and in general, the resilience of Shirabad is 0.77, which is not resilient. Finally, according to interviews with experts, a set of solutions to make this region more resilient has been given.

Keywords: physical resilience, mean-optimal method, Shirabad, Zahedan.