

## The Thesis Submitted for the Degree of M. Sc (Geography and urban planning, housing planning and urban regeneration)

## Investigating the housing situation in the physical development of the city of Sarbaz (*Kalat*)

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## **Abstract**

Housing is one of the most important social components in Sarbaz city, on which the well-being and quality of citizens depend. Due to the change and displacement of population groups and the lack of supporting resources, the housing production process requires great importance. Therefore, having a planning system in order to create coordination between the housing sector and other sectors is an inevitable necessity. Due to the importance of housing in human life, in the development of the city, in access to urban services and such things, it is necessary for every city to make necessary plans in this field in order to provide housing for the future. In the city of Sarbaz Kalat, the methodology of the present research is descriptive-analytical and based on library studies, documents and field surveys. Authentic documents, such as various maps that can be used in the municipality and other city organizations, as well as the detailed plan of the city of Sarbaz and Bakhshi, were prepared through observation and field observations. And the statistical data was obtained from the 2015 census data of Iran Statistics Center. And the 12.5-meter DEM was used to extract the slope and roughness. The software used includes ArcGIS, Export choice and SPSS. After preparing the indicators and measures of the housing condition, they were classified and valued in the ArcGIS software environment, and the final weight of each index was prepared using the AHP method in the Expert Choice software, and after applying the weights to the indicators and merging the layers according to the method Fuzzy Gamma Gamma was obtained as the final index of the housing situation. The results show that most of the blocks located in the northern and central parts and some scattered blocks in the south are in good classes and have higher housing status. Also, parts of the north and south of Sarbaz city are in the low class and a few blocks in the city center are in the middle class. 45.49% of the total houses in the studied area are in good condition, 9.35% are in average condition and 21.19% are in poor condition. And 23.96% of the blocks have no structure. The spatial pattern of the housing condition using Moran's spatial autocorrelation showed the cluster pattern distribution and the results of the Pearson correlation coefficient showed that among the studied variables, the building skeleton variable, building quality, building age and building materials with the housing condition variable, they have a direct and strong relationship, and the relationship is significant at the 99% level. According to the slope and elevation maps, the city of Sarbaz is located in the mountainous region, on the north and west of the mountains and on the south and east of the river, and these obstacles cause the growth and expansion of the city. And most of the materials and quality of the buildings are in a poor condition, so to increase the quality of housing, the only way to improve and increase the housing is in terms of materials.

Key words: Housing, City, Physical development, Sarbaz(Kalat)