
Study of social functions of Qanat (subterranean) in rural areas with emphasis on social capital indicators (Case study: Hamadan Township)

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Abstract

Ganats in Iran have different economic, socio-cultural and environmental functions in cities and villages. One of the factors that affects the ability of society to manage shared water resources is social capital. On the other hand, the existence of Ganat creates a participatory space in the villages, and this participatory space is the source of social capital in the villages. The present research method is descriptive-analytical with the aim of investigating the role of Ganats in increasing the social capital of rural residents in the central District of Hamadan Township. level of social capital in the studied villages was measured in four components of social cohesion, social participation, social trust and social security. The reliability of the questionnaire was confirmed by Cronbach's alpha value of 0.82. The opinions of academic experts were used for validity. The statistical population consisted of 15 villages that were divided into two groups, villages with and without Ganats. Out of 9257 households in the statistical population, the sample size was determined based on Cochran's formula of 369 households, the share of villages with Ganats was 244 households and villages without Ganats were 125 households. Required data were collected based on field studies and library documents. The collected data were analyzed by statistical tests such as t-test. The results showed that social capital in villages with Ganats with an average of 3.98 and villages without Ganats with an average of 3.37 are in good condition, but the T-test at 99% showed a significant difference in the amount of social capital in the two groups of villages, meaning that the amount of social capital in villages with Ganats was higher. Strengthening social capital can act as a tool to achieve sustainable management of water resources and sustainable rural development, which social empowerment of villagers, self-confidence and self-confidence in them.

Keywords: Aqueduct, Social Capital, Social Network, Social Participation, Village Hamadan Province.

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