



**University of Zabol  
Graduate School  
Faculty of Literature and Human Science  
Department of Geography**

**The thesis Submitted for the Degree of M.Sc  
(in the field of Geography and rural planning)**

**Analysis of acceptance of solar energy utilization in rural  
areas in order to achieve sustainable development  
(Case Study: Villages of Hamoun Township)**

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## **Abstract**

**Due to the geographical conditions and dispersion of Iranian villages, the use of solar energy is one of the best ways to produce and supply energy that does not require transmission and distribution networks and high costs. The present study seeks to analyze the acceptance of solar energy utilization in rural areas in order to achieve sustainable development in the villages of Hamoon Township. For this reason, this study seeks to find the most important factor affecting the acceptance of solar energy in the social dimension and which economic factor causes the rejection of solar energy among the villagers in the study area. The methodology of the present study is descriptive-analytical and based on library studies and survey studies. Data analysis was performed by SPSS software and hypotheses were tested by one-sample t-test, Fisher test, linear regression analysis and fuzzy TOPSIS model. The statistical population includes households living in the villages of Hamoon city. 40 villages were randomly selected and 380 questionnaires were distributed. The results show that the social awareness of the villagers is the most important factor affecting the acceptance of solar energy in the social dimension. Low income are the most important factor affecting the rejection of solar energy in the economic dimension. Therefore, the results indicate that solar systems, due to their ease of use and usefulness, can be a suitable option in responding to the problems of sustainable rural energy supply and achieving sustainable rural development. The most important research suggestion is that education and awareness should be continued and financial problems should be facilitated for the provision and installation of solar technologies.**

**Key Words: Solar energy, Sustainable development , Hamoun Township, Rural, renewable energy.**