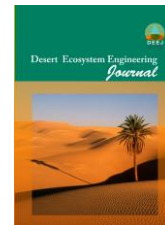




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## physical and chemical properties of soil Investigate under two range management scenarios (case study: Chut Rangelands in Gonbade kavoods)

Zahra Jafari<sup>1\*</sup>, Hamid Niknahad Gharmakher<sup>2</sup>, Choogh Bayram Komaki<sup>3</sup>

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### Abstract

Soil quality includes two general points of view; intrinsic characteristics and the dynamic nature of soil that is influenced by human activities and management decisions. Therefore, in this study, changes of soil quality indicators under two management systems, including corporate management and parcenary management, were assessed. At first, the study area was identified by using the images of Landsat satellite and Google Earth software, then controlled by field survey and GPS. Soil samples were obtained randomly as a pair from depth of 0-30 cm on both sides of the border separating the two parts (7 sampling points with three replications in each part). Finally, 21 samples were collected from each part of study area. Then, to determine the physical indicators (soil texture, aggregate stability, bulk density and porosity) and chemical indicators (organic matter, pH, electrical conductivity, nitrogen, sodium and potassium), samples were transported to the laboratory. The statistical analysis over data was performed by using SPSS 16.0 software and T student test. The results demonstrated that, soil organic matter, nitrogen, soil stability and porosity in soil were significantly increased, but soil bulk density was significantly decreased in the section of corporate management by comparison with the section of parcenary management.

**Keywords:** Soil quality, Range management, Chut and Gonbade kavoods.

1. M.S.C students of Rangeland and watershed faculty of Gorgan University of Agricultural Sciences and Natural Resources Gorgan  
Corresponding Author Email: jafariz68@yahoo.com

2. Assistant professor of Rangeland Management Department of Gorgan University of Agricultural Sciences and Natural Resources Gorgan

3. Assistant professor of Desert Management Department of Gorgan University of Agricultural Sciences and Natural Resources Gorgan