

## ABSTRACT

Changing natural ecosystems land use to organized eco systems are resulted in change of physical and chemical soil features. Due to widespread change in land use. This study was conducted to show the effects of land use change on soil properties in Taftan zone which is located in Sistan and balouchestan province(Iran). For this purpose, some of the soil physical and chemical properties, such as pH, EC, Nitrogen, Organic Carbon, Labile Carbon in orchard, irrigated farming, abandoned farmland and pasture was measured in depth of 0- 30 centimeter land use. In addition, to determine the difference among all the studied case factors, data were subjected to analysis of one-way variance in a completely randomized design. Also, Duncan method was used to show comparison means. The results showed that, because of land use change in orchard, all studied case factors except phosphor and labile carbon didn't have significant change. there was no notable difference among other properties ( $p < 5\%$ ), except silt and nitrogen. Furthermore, among all studied factors just electrical conductivity had important variations. although other properties such as organic carbon, nitrogen, potassium, phosphorus, carbon and Labile in orchard land use more calculated. Result of compared irrigated farming with pasture revealed that only nitrogen and silt factors had significant difference. So the amount of nitrogen (0/08%) and silt in irrigated farming was greater than nitrogen and pasture. comparison land use feature in abandoned farmland with pasture showed that there arent any significant difference among other soil factors except electrical conductivity, namely, electirical conductivity in abandoned farmland was remarkably better. but the amount of pH,  $\text{CaCO}_3$ , phosphor and potassium in pasture was more than abandoned farmland and organic carbon and nitrogen in abandoned farmland had greater amount in comparison with pasture. Comparison of soil properties of studied land use showed that except of phosphor,  $\text{CaCO}_3$ , the rest of studied features had noticeable difference. The general result of this study showed that with change of land use from pasture to agriculture the amount of pH was reduced and EC was increase and the maximum phosphor, nitrogen, organic matter and carbon labile was related to irrigated agriculture.

altitude and slope) are more effective than those related to the soil.

**Keywords:** Change of Lands Utilization, Soil Physicochemical Characteristics, Soil Destruction and Taftan Pastures



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# **The Effect of Chenges from Pasture to Agricultural Utilization on Soil Fertility in Taftan Region**

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