

**Abstract:**

One of the most important ways of being adapted with droughts and preventing from desertification process is beneficial use of water resources. It should also be tried to use rainfalls and surface currents as effectively as possible. For this purpose rain water harvesting and micro catchment structure have been constructed in vast areas in sistan and Baluchistan rangelands. as much as assessing of variations in range's ecosystems is necessary after amendment and rehabilitating to identify it's effects, this study carried out to investigate effects of construction of crescent-like micro catchment (Helali-e-abgir) on variations of vegetation cover's parameters in Tangenedam rangeland of Zahedan township. For this purpose two site including an implementation site and control site was selected. In each site by use of Random- systematic method trough twenty- 100 meter transect in 20 plot was gathered samples in growing season. production and canopy percent factors was estimated. For comparing of plant's parameters in implementation treatment and control one, data was analyzed through T-test method. The results show that the average of canopy in all species in implementation site by 20.36 percent and in control site 11.08 have been increased respectively. About effect of crescent-like micro catchment (Helali-e-abgir) on production by 0.046 the opposite hypothesis was accepted. By average this implementation has resulted in increasing production in 95 percent level.

**Keywords:** Vegetation Restoration, Crescent-Like Micro-Catchment, Rainwater Harvesting, Tangenedam Rangeland, Zahedan



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Effect of rainwater harvesting through crescent- Like micro-catchment on restoration of Tangnedam rangeland, Zahedan Township

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