

عنوان مقاله:

Site Selection for Small-Scale Solar Ponds to Provide Wildlife with Fresh Water using MCE and GIS

محل انتشار:

اولین کنگره پژوهشی کاربرد علوم نوین در مطالعات جغرافیایی ایران (سال: 1394)

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خلاصه مقاله:

This study is an attempt to find suitable places to make use of solar energy, to provide wildlife with fresh water. Meanwhile, GIS multi-criteria evaluation (MCE) is used to define suitable sites based on decision making criteria. Weighted Linear Combination (WLC) was applied to superimpose data layers along with their defined weights obtained via AHP method. Based on the findings, 1800 Km² of total area is already lacking in sufficient water distribution. Thus using simple, small scale solar installations could come to aid to augment current fresh water amount. Small scale solar ponds are of higher priority because of their simplification and lower cost of maintenance compared other solar desalination facilities. Rough estimate of the ability to use solar pumps to pump water from the reservoir to the troughs, or maybe pumping from underground water, is also evaluated

کلمات کلیدی:

wildlife, solar energy, Persian Leopard, Desert Bighorn Sheep, Gazelle dorcas

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