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Water harvesting and groundwater artificial recharge in Jordan

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Water resources in Jordan have been developed and utilizes to a great extent so that groundwater resources are over-exploited by twice their safe yield. In addition surface water resources have been captured an put into use. Thus, a robust management plan is required to increase the availability of fresh water. At present, water management programs in Jordan needs to consider reclassification of the old dams in terms of usage and select new sites on where to establish a dam collecting a few million cubic meters of water for different purposes, because some of the old dams are not working as intended. None the less, some potential for water harvesting and groundwater recharge still exists in Jordan to collect few hundred thousand cubic meters per site in water shortage areas. Such small amounts of water can alleviate and solve many water shortage problems, especially drinking water during the dry season with no rain. Therefore, in this study some potential areas for water harvesting and groundwater recharge are delineated and the preconditions and relevance for their selection explained. In addition, recognizing the fact that more water is used during the summer months, the importance of such supplementary supply from the harvested or recharged water is demonstrated.