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Development of ecosystem services to combat drought and desertification

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Human life quality and goods production in drylands and degraded land are critically dependent on the ecosystems services directly and indirectly related to the water cycle. To what extent can human interventions improve the water cycle to support ecosystem services?. The decline or the improvement of ecosystem services is considered a suitable and feasible indicator for monitoring desertification and land degradation processes. Improvement of ecosystems services has multiple environmental, economic and social benefits.
The efforts made to reclaim and restore degraded lands needs considerable efforts and resources. Thus it is increasingly necessary to quantify the effectiveness of the activities and make progress in the direction of a self-sustainable ecosystems service management. The goal of self-sustainability can be pursued adopting strategies that take advantage of the best scientific knowledge such as the stimulation and reinforcement of the hydro-biological pump and the soil water holding capacity. Existing large scale ecosystem service improvements confirm the benefits of hydrological cycle improvements but integrated monitoring efforts are needed to document the results achieved and achievable.