



Argan woodlands in South Morocco as an area of conflict between degradation and sustainable land use

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The Argan woodlands are endemic for South Morocco and prone to degradation through expanding and intensifying agriculture and overgrazing. Unvegetated areas extend further due to degradation of soil and vegetation. Here infiltration is less than on vegetated areas, while runoff and soil erosion increase. The sale of the highly valuable oil, gained from the seeds of the argan tree, can be seen as an economic alternative for the region and a chance of survival for the argan woodlands. With the introduction of women's cooperatives for the production and sale of the oil, the Gesellschaft für Technische Zusammenarbeit (GTZ, Association for Technical Cooperation) hoped to halt argan degradation from 1995 to 2002. The effects of this approach shall be studied in a proposed DFG-project. The erosion gradient between soils under canopy cover and intertree areas in varying stages of degradation will be at the center of the analysis. Insight into onsite and offsite degradation shall be gained through the measurement of runoff and erosion rates, which lead to rill and gully erosion downslope. Measurements of soil chemical and physical properties might also help indicate when an argan woodland can be classified as natural. Furthermore to be studied are the effects of the new found value of the Argan woodlands among the local population with focus on regional tourism and a possible reduction of grazing pressure. Sustainable soil management in combination with the needs of the local population is essential for a sustainable land use in the region.