Photo monitoring environmental changes

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Studies on the impacts of environmental rehabilitation in semi-arid areas are often conducted over limited space and time scales, and do typically not include detailed bio-physical components. As a first in its kind, this study makes a multi-scale assessment over a time span of 30 years of environmental rehabilitation in one of the world's most degraded areas: the Tigray highlands of Northern Ethiopia. The study shows that in Tigray sheet and rill erosion rates have decreased, infiltration and spring discharge are enhanced, vegetation cover and crop production have improved. These impacts are evidenced and quantified by a comprehensive comparison of the current landscape with a coverage of 30-year old photographs and substantiated by field investigations.

The positive changes in ecosystem service supply that result from changing land cover and management in the Tigray highlands are an issue of global concern.

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