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The northern Ethiopian highlands are greener than at any time in the last 145 years

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As quantitative or spatially distributed studies of environmental change over truly long-term periods of more than 100 years are extremely rare, we re-photographed 361 landscapes that appear on historical photographs (1868-1994) within a 40 000 km² study area in northern Ethiopia. Visible evidence of environmental changes apparent from the paired photographs was analysed through expert rating. Woody vegetation, soil and water conservation and land management were in worse condition in the early period as compared with the present; the cover by indigenous trees is a notable exception: it peaked in the 1930s, declined afterwards, to reach a second peak in the early 21st century. Particularly in areas with greater population density, there is significant increase in woody vegetation and soil and water conservation structures through the study period. We conclude that, except for an apparent upward movement of the upper tree limit, direct human impact on the environment is overriding possible effects of climate change in the north Ethiopian highlands, and that, currently, the northern Ethiopian highlands are greener than at any time in the last 145 years.