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One Million Years of Human-Landscape Interaction in the Ethiopian and Kenyan Rift-System

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Landscapes form the basis for the development of human habitats. Studying human-landscape interactions thus requires an understanding of the character and evolution of landscapes on different temporal and spatial scales. In Africa, key anthropological sites are often associated with the tectonically active sectors of the East African Rift. But the landscapes inhabited by our ancestors have undergone massive changes over time, changes driven by climatic variability as well as long-term geomorphological and tectonic processes. River courses have changed, lakes expanded and then disappeared, and volcanic and tectonic activity formed steep fault scarps and barriers. Here we present a review of archaeological, paleo-climatological, paleo-limnological, tectonic and soil nutrients data sets of the southern Ethiopian and Kenyan Rift System in Eastern Africa of the past 1 Million years. Results suggest that tectonic processes and climatic change created a unique suite of landscape features potentially advantageous for human inhabitance. The combined analysis thus allows the quantification of styles and rates of surface modification, which in turn can be used for reconstructing ancient landscapes.