Geophysical Research Abstracts Vol. 19, EGU2017-16038, 2017 EGU General Assembly 2017 © Author(s) 2017. CC Attribution 3.0 License.



The charcoal-degradation nexus: contested 'fuelscapes' in the sub-Saharan drylands of northern Kenya

Christoph Bergmann (1), Maike Petersen (1), Paul Roden (2), and Marcus Nüsser (1) (1) SAI - Department of Geography, Heidelberg University, Heidelberg, Germany (c.bergmann@uni-heidelberg.de), (2) Kenyatta University, Department of Geography, P.O. Box 43844, 01000, Nairobi, Kenya

Charcoal ranks amongst the most commercialized but least regulated commodities in sub-Saharan Africa. Despite its prevalence as an energy source for cooking and heating, localized environmental and livelihood impacts of charcoal production are poorly understood so far. The identified research deficit is amplified by widespread negative views of this activity as a poverty-driven cause of deforestation and land degradation. However, the charcoal-degradation nexus is apparently more complicated, not least because the extraction of biomass from already degraded woodlands can also be interpreted as an appropriate option under given management regimes. In order to better calibrate existing research agendas to site-specific geographies of charcoal production, we propose a re-conceptualization of such energy landscapes as 'fuelscapes' with complex material and social dimensions. The concept is tested with reference to a case study in Central Pokot, northern Kenya, where charcoal production only began in the early 1990's. Based on the assumption that the fine line between sustainable land management and degradation in dryland energy landscapes is not only highly variable but also increasingly contested, our study combines the knowledge input of different stakeholders with longitudinal time series of remote sensing data. Based on the results of our interdisciplinary analyses, we outline an integrated tool for the co-operative monitoring and management of prevailing degradation processes against the background of diversified livelihood activities in sub-Saharan drylands.