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“Solidarity in a competing world —  
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## Local Understandings of Soil Fertility, Rainfall and Conservation Agriculture in Laikipia, Kenya: A Qualitative Analysis

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### Abstract

Conservation Agriculture (CA) is mostly referred to in the literature as having three principles at the core of its identity: minimum soil disturbance, permanent organic soil cover and crop diversity. This farming package has been described as suitable to improve yields and livelihoods of smallholders in semi-arid regions of Kenya, which since the colonial period have been heavily subjected to tillage. Our study is based on a qualitative approach that followed local meanings and understandings of soil fertility, rainfall and CA in Ethi and Umände located in the semi-arid region of Laikipia, Kenya. Farm visits, 53 semi-structured interviews, informal talks were carried out from April to June 2015. Ethi and Umände locations were part of a resettlement programme after the independence of Kenya that joined together people coming from different farming contexts. Since the 1970–80s, state and NGOs have been promoting several approaches to control erosion and boost soil fertility. In this context, CA has also been promoted preferentially since 2007. Interviewees were well acquainted with soil erosion and the methods to control it. Today, rainfall amount and distribution are identified as major constraints to crop performance. Soil fertility is understood as being under control since farmers use several methods to boost it (inorganic fertilisers, manure, terraces, agroforestry, vegetation barriers). CA is recognised to deliver better yields but it is not able to perform well under severe drought and does not provide yields as high as ‘promised’ in promotion campaigns. Moreover, CA is mainly understood as “cultivating with chemicals”, “*kulima na dawa*”, in kiswahili. A dominant view is that CA is about minimum tillage and use of pre-emergence herbicides. It is relevant to reflect about what kind of CA is being promoted and if elements like soil cover and crop rotation are given due attention. CA based on these two ideas, minimum tillage and use of herbicides, is hard to stand as a programme to be promoted and up-scaled. Therefore CA appears not to be recognised as a convincing approach to improve the livelihoods in Laikipia.

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