



Tropentag, September 20-22, 2017, Bonn

“Future Agriculture:  
Socio-ecological transitions and bio-cultural shifts”

## Feeding the Soil and Feeding the Cow – Conservation Agriculture in Kenya

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### Abstract

One of the main obstacles to the implementation of Conservation Agriculture (CA) in sub-Saharan Africa is the priority given to using crop residues as cattle feed rather than mulching material. As documented in past projects (e.g. CA-SARD, CA2Africa, ABACO), in this way the CA approach will not reach its full potential - particularly in countries with a limited biomass production due to climatic conditions. To identify pathways for enabling an implementation of CA that is not in conflict with other goals of farmers' livelihoods (e.g. livestock farming), we used a transformative learning approach with farmers and other stakeholders in Laikipia County (Kenya). The learning elements comprised: a timeline that encompasses the past promotion activities; stakeholder mapping which highlights the various stakeholders involved and their influence; non-scripted participatory videos filmed by the stakeholders themselves that show the farming system from different perspectives; focus group discussions structured by the Qualitative expert Assessment Tool for CA adoption in Africa (QAToCA). Challenges to CA adoption that were jointly identified include the competition for fodder, a lack of financial resources to get started with CA. There are knowledge gaps on proper application of CA equipment, on the fodder production and conservation options and, lastly, on sustainable crop-livestock production systems. Furthermore, farmers feel disconnected from existing governmental support. However, our findings highlight solutions which enable feeding the soil “and” feeding the cow. Some farmers already have started to grow forages on their farms in order to reduce dependence on crop residues as a feeding source – an approach which had not been promoted during past projects. This shows the importance of an enabling environment provided by government programs which supports long-term extension efforts combined with farmers' willingness to jointly learn towards a more sustainable agriculture. On farms where both systems (CA and conventional) are practised, women play an important role by experimenting with CA practices, thereby realising promising results in terms of yield and drought resilience. Furthermore, our findings underline the need for a long-term monitoring of innovation processes which is often not possible within short-term research projects and promotion programs.

**Keywords:** Adoption constraints, conservation agriculture, livelihoods, livestock