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Promotion of mechanisation for smallholder farmers: insights and learnings from Zambia

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Abstract

The agricultural sector in Zambia has so far been characterised by low mechanisation. Most farmers still cultivate and maintain their land by hand, with negative consequences for productivity. Not only is less arable land cultivated than is available, but farmers are also unable to make optimal use of the time slots favourable for planting and weed control. A major reason for the often unproductive farming methods is the lack of access to financing for agricultural equipment.

In 2017 KfW Development Bank supported the establishment of Agricultural Leasing Company Zambia Limited (AgLeaseCo), which aims to promote agricultural modernisation in Zambia through an innovative leasing scheme. The target group of the private Zambian company are primarily wealthier smallholder farmers who cultivate between 5 and 20 hectares of land. By providing financing in the form of leasing, these farmers are supported in modernizing their farming methods through the acquisition of equipment, such as tractors, cultivation implements, or planters. By lending their leased machinery to surrounding farmers for a rental fee, also smallholder farmers who are not (yet) able to obtain agricultural equipment themselves benefit.

A team from INEF, University of Duisburg-Essen, analysed this good practice example of promoting agricultural modernisation in Zambia through focus group discussions with benefitting farmers and interviews with key stakeholders involved in the leasing process (e.g. AgLeaseCo staff, equipment suppliers, traditional leaders). The INEF-team looked into AgLeaseCo's business model, farmers' investment preferences, the lease's impact on agricultural productivity and livelihoods, as well as challenges and problems throughout the leasing process. Especially, the impact on poorer smallholders, who achieve (partial) mechanisation through hiring leased machinery, was looked into. The research thereby examined the question of how the introduction of modern means of agricultural production can affect both the area cultivated as well as the yields and incomes of smallholder farmers, and can thus ultimately contribute to poverty reduction and food security in rural areas.

The contribution aims to present the case studies' innovative idea and lessons learned derived from the research results, and to explore pathways to transfer this good practice for promoting agricultural modernisation to other contexts.

Keywords: Agricultural equipment, agricultural finance, leasing, mechanisation, smallholder farmers, Zambia