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“Development on the margin”

Determinants of Farmers’ Participation in Outgrower Schemes in the Biofuels Sector of Malawi

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Abstract

The interest in large-scale commercial investments in Sub-Saharan Africa for food and bio-energy production has increased significantly in the recent past. Considerable debate has focussed on their chances and risks for rural development and poverty reduction. Outgrower schemes are a form of large-scale investments which are contractual partnerships between an agro-industrial company and small-scale producers. These schemes have often been claimed to be beneficial for rural development and poverty reduction as they provide farmers with access to finance, modern technologies, know-how, and markets. However, poverty reducing effects depend on whether poor farmers can participate directly in such investments or whether they lack the means to do so.

This paper seeks to address this issue by analysing determinants of farmers’ participation in outgrower schemes in the sugarcane sector of Malawi. Sugarcane is produced commercially in Malawi since the 1960s and has strongly expanded since then. Since 1982, ethanol is being produced as a major by-product out of sugarcane. Its production targets the domestic petrol market, which has a 10 per cent ethanol blend. The sector is traditionally based on estates for sugarcane cultivation. In the recent past, however, land under smallholder production has increased considerably due to donor-funded large-scale smallholder-based irrigation schemes as a strategy to reduce rural poverty. As a result, outgrower schemes have evolved over time and increasingly integrate smallholders in the sugarcane sector.

This paper is based on a case study of commercial sugarcane production in Central Region of Malawi in Nkhotakota District. The analysis draws from primary data of around 500 randomly selected farm households. The data were collected during November and December 2010 in the vicinity of the Dwangwa sugar mill and ethanol factory close to Lake Malawi. Three main groups are covered in the sample: farmers producing sugarcane under rainfed conditions; farmers producing sugarcane on small plots in collectively managed irrigation schemes; and non-sugarcane growers in the same sugarcane producing region. The paper develops a multivariate logit model to identify the factors determining households’ participation in rainfed and irrigated sugarcane schemes.

Keywords: Biofuels, Malawi, outgrower, participation, sugarcane