# OVERCOMING TRANSACTION COSTS BARRIERS TO MARKET PARTICIPATION OF SMALLHOLDER FARMERS IN THE NORTHERN PROVINCE OF SOUTH AFRICA

by

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## Dedication

To all agricultural economics students and the smallholder farmers in the African continent

#### ACKNOWLEDGEMENTS

The only viable way of completing a project of -any significant magnitude is to partly relinquish control to others. My thesis was not an exception to this rule. I, therefore, share the ownership of this work with several others and wish to acknowledge their contributions.

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Moraka T Makhura Pretoria, South Africa June 2001

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#### ABSTRACT

The objective of this study is to investigate the role of transaction costs in determining market participation of smallholder farmers. It is expected that the identification of these transaction cost factors could assist in the formulation of policy interventions and/or institutional innovations to alleviate constraints on market participation and improve the ability of these small-scale farmers to become part of the commercial agricultural economy. Transaction costs differ between households due to asymmetries in access to assets, market information, extension services and remunerative markets. The study particularly investigated the factors contributing to different levels of transaction costs amongst households.

The main hypothesis of the study is that small-scale farmers facing lower transaction costs will participate more in agricultural markets. Transaction costs reflect the character of the market, but are mainly embedded in the characteristics of individual households and their economic environment. In order to test the hypothesis, selectivity models identifying and testing

significant factors related to market participation are applied to a survey of 157 farming households in the Northern Province. These households take part in the markets for horticulture, livestock, maize and other field crops. The selectivity models used involve two-step estimation similar to the Heckman's two-stage procedure.

The study reveals that access to assets and market information in combination with particular household characteristics are important determinants of market participation. Among the assets of a household, a reasonably sized area of arable land tends to encourage participation in all markets, apart from the market for other field crops market. Ownership of livestock tends to stimulate livestock selling and also the level of maize sales. Ownership of arable land and livestock contribute to the economies of scale of production, which leads to lower transaction costs per unit output sold. Nonfarm earnings only alleviate variable transaction costs in horticultural markets, but not in other field crops markets. Pensions discourage participation in high value commodities markets since they are viewed as alternative cash income.

Indicators enhancing the role of information access include proximity to markets and contacts with the extension service. Proximity to markets reduces variable transaction costs in horticultural markets and fixed transaction costs in livestock markets. The study shows that every kilometre closer in proximity to markets, the horticultural sales increase by R152. Proximity and contact with extension services discourage participation in other field crops markets. Good road conditions reduce transaction costs for livestock and other field crops. The study also shows that in spite of bad road conditions some horticulture farmers still manage to market most of their products.

A larger sized household tends to increase the transaction costs in marketing all commodities except for the other field crops. Female farmers tend to participate more in livestock markets as they own small livestock and poultry that are easy to sell, and keep livestock for livelihood purposes rather than for social status. On the other hand, female farmers appear to be constrained in

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their participation in horticultural markets, ostensibly due to problems of access to irrigation resources and cultural and legal perceptions. Older farmers with enough social capital are willing to sell, but in horticulture and maize they tend to sell lower quantities.

The study raises issues which, when attended to, might reduce the transaction costs, particularly by enhancing access to information and providing endowments to farming households. Some constraints require direct policy measures, such as policies dealing with land reform, extension services, education and legal reforms, and then there are those that require indirect intervention and private sector involvement such as road networks and market availability.

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