

Market risk perceptions in smallholder maize production commercialisation: Implications for rural agricultural and marketing infrastructure development in the Eastern Cape

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Abstract

South African government policies place the development of smallholder commercial agriculture in the heart of solving the tripartite challenges of poverty, inequality and unemployment. Under these policies, the government has launched agricultural infrastructural development programmes targeted at unlocking Eastern Cape Province enormous potential for commercialised poverty reducing smallholder agriculture. Despite all external top-bottom approach support of agriculture by the government through several programmes, agricultural commercialisation remains an internalised decision made towards the market orientation of crop and livestock production. Furthermore, commercial agriculture is an inherently risky endeavour riddled with production, human, enabling environment, financial and market risk. How farmers perceive potential market risks becomes fundamental in decision making towards their market orientation as suggested by the Proactive Continuous Risk Assessment Reference Theory. Therefore, the main aim of this cross section designed study was to investigate market risk perceptions' influence on smallholder commercialisation levels and market risk perceptions. A multistage purposive sampling was used and Cochran equation was used to obtain a sample of 322 smallholder maize farmers in Ingquza Hill Local Municipality, South Africa. Their level of commercialisation was measured using Household Commercialisation Index (HCI) while a Likert Scale was used to aggregate their market risk severity perceptions responses in administered questionnaire. Bivariate Kendal's tau-b correlation analysis was used to empirically confirm the existence of a relationship between the variables their market risk perceptions and level of commercialisation. A strong negative correlation of $T_b = -0.764$ was confirmed displayed significance ($P < 0.05$). Tobit Regression Model was used to econometrically detect the significance of market risk perceptions among socio – economic, institutional and agronomic factors influencing the level of commercialisation. Market risk perceptions were confirmed to be significant ($P < 0.05$) in determining the level of commercialisation. Other significant socio – economic variables included the level of education, cropping programme/cooperative membership, climate perceptions and experience in farming. This demonstrates that market risk perceptions are important in ensuring that smallholder farmers commercialize their production and agricultural post-harvest and marketing infrastructure is optimally used. This information can be used by the Department of Rural and Agricultural

Development and Department of Agriculture, Forestry and Fisheries in an effort to improve their extension service in order to grow resilience among smallholder farmers and ensure facilitated rural markets and infrastructure remain viable.

Key words: Market risk; Smallholder farmers' perceptions; Multinomial regression model; Proactive continuous risk management theory; Tobit regression model.