

THE ROLE OF CONTRACTUAL RELATIONSHIPS IN THE PERFORMANCE OF SUPPLY CHAINS: THE CASE OF THE SUGAR INDUSTRY IN SWAZILAND

by

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DEDICATION

To my family and friends



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Degree:

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Department:

Agricultural Economics, Extension and Rural Development

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ABSTRACT

The purpose of this study is to investigate the role of relational factors in the performance of the sugar industry supply chain in Swaziland. In this study a supply chain is conceptualised as a series of connected activities concerned with planning, coordinating and controlling the production of sugar, starting with the production of sugarcane by farmers, through processing by the millers and finally delivery to the consumer. Thus it can be broken down into units, beginning with the cane growers who provide sugarcane to millers, who process it into sugar and pass it on to the Swaziland Sugar Association, which then markets it on behalf of the farmers and the millers.

This study has posited that social factors play an important role in the performance of smallholder cane growers in their relationship with millers, and hence the performance of the sugar supply chain. These factors are embedded in the behaviour of the units that form the supply chain and are important in enhancing the performance of the supply chain. In testing the hypothesis, descriptive and multivariate analyses involving regression analysis and



structural equation modelling, were used on a sample of 124 smallholder cane growers and 3 millers.

The results suggest that the performance of the sugar industry supply chain is influenced by two categories of factors: (1) those that relate only to the smallholder farmers, such as transport costs, amount of irrigation water, percentage changes in their production quota, distance between farmers' production sites and the mill, value of assets per ha, yield per ha, and sucrose content; and (2) those that relate to the smallholder farmers' relationship with millers, such as dependence on the millers, perceived poor cooperation between farmers and millers, lack of goodwill trust, and perceived opportunistic behaviour practised by millers.

The results agree with *a priori* theory that trust, cooperation, commitment and the absence of opportunistic behaviour are essential elements for a successful relational exchange. The study suggests that a relationship founded on trust and mutual respect is more likely to succeed than a relationship of convenience supported by legal contingencies. Therefore, a supply chain that is characterised by trust, physical and psychological commitment as well as cooperation between parties within the supply chain is important in providing mutual benefit and good relationships.

Several implications can be made from this study: Firstly, theoretically there is a need for more research incorporating elements of social capital in supply chains in order to establish a consensus in the conceptualisation of the different constructs and their measures. Secondly, both cane growers and millers need to focus on initiating, signalling and disclosing their behaviours in an effort to improve their relationship with each other. Cane growers and millers need fair practises, sense of integrity, effective communication, commitment and shared purpose. These conditions would facilitate the development of trust, reduce opportunistic behaviour and promote cooperation. This would improve the performance of the sugar industry supply chain. Finally, the Swaziland Government needs to create a macroeconomic environment that is conducive to creating cooperation between smallholder farmers and the private sector. This could be accomplished through: (1) a policy that ensures that the legal framework is favourable to business relationships, such as well-defined legal and regulatory measures that govern business relations and transactions; and (2) providing support for enterprises and encouraging creation of efficient, flexible and independent farmers' associations and cooperatives that are based on economic objectives.



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