

Impediments to Competitiveness of Small and Medium-Scale Maize Milling Enterprises in South Africa

Orefi Abu^{1,2}

University of Pretoria, Pretoria 0002, South Africa

²University of Agriculture, P.M.B. 2373 Makurdi, Nigeria

Abstract

The maize milling industry is highly characterised by continuous growth in maize milling and retailing margins in real terms (Traub and Jayne, 2004) despite the benefits and opportunities brought about by the deregulation of the South African maize market in 1997. This may be indicative of the inability of small and medium-scale maize milling enterprises (SMSMMEs) to emerge and compete with large-scale maize millers. This paper examines the constraints faced by SMSMMEs in South Africa. Data were collected with the aid of a structured questionnaire. Millers were asked to identify the various challenges facing their enterprises. Some key constraints identified were; high transport costs, high maize prices, brand name establishment and government policies such as the compulsory maize meal fortification regulation and high taxes. Other perceived constraints included lack of adequate infrastructure, storage facilities, access to credit and seasonality of maize grain.

Keywords: Enterprises, Maize, Milling, South Africa

Introduction

Maize is without doubt the most important grain crop in South Africa, due to its position as a food security grain and a chief constituent in animal feeds. Maize is the staple food of the majority of the South African population (Food Price Monitoring Committee, (FPMC), 2003) and contributed about 42 % of the gross value of field crops and 11 % of total gross value of the agricultural sector between 2003 and 2004 (NDA, 2005).

The deregulation of the South African maize markets in 1997 was expected to lead among other things, to a more proficient use of resources; a more efficient and competitive agricultural marketing system; increased investment and employment in agricultural activities and a fall in real food prices (Bayley, 2000). In spite of the various benefit and opportunities brought about by the deregulation of the maize industry, it remains extremely difficult for SMSMMEs to compete in the industry. As a result the maize milling industry in South Africa remains extremely characterised by continuous growth in maize milling/retailing margins in real terms (Traub and Jayne, 2004). Although some studies have been carried out to examine the constraints facing small-scale food processing sector in South Africa, knowledge of exact constraints facing the SMSMMEs as a sub sector is lacking. In view of the deregulation in the maize market, knowledge about

the constraints facing SMSMMEs under deregulation is extremely valuable for policy makers. Specific information is lacking on the nature of constraints that cause difficulty or prevent SMSMMEs from expanding and thereby creating competition for the large-scale milling enterprises. This paper is an attempt to fill this important gap and examines the constraints limiting competitiveness in the SMSMMEs in South Africa since deregulation in the maize industry.

Materials and Methods

This study is based on the cross sectional survey and data obtained from a sample of SMSMMEs from four provinces in South Africa namely; North West, Mpumalanga, Free State and Limpopo. These provinces represent the major areas of commercial maize production in South Africa. The second stage involved a simple random selection of millers from each of the four provinces. The survey was carried out from August 2005 to October 2006. Data were collected with the aid of a structured questionnaire. The questionnaires were administered through mail survey, field visits and telephone interviews. A total of 60 millers were surveyed out of the 139 millers (production milling or a combination of production milling and custom milling) from North West, Mpumalanga, Free State and Limpopo. This represents about 43.2% of millers in the four provinces.

Results and discussion

Profile of SMSMMEs in South Africa

The majority of the millers (58.3%) indicated that they carry out both production milling and custom milling, while 41.7% of the millers engaged in production milling (Table 1). The practice of combining production and custom milling according to Jonsson, Dendy, Wellings and Bokalders (1994) is recommended as it tends to increase the use of machinery thereby generating more income. The South African maize meal is usually graded according to quality level and extraction rates. The most common grades are; 'super', 'special', 'sifted' and 'unsifted' with extraction rates of 62.5%, 78.7%, 88.7%, and 98.7% respectively (FPMC, 2003). The 'special' (30%) and 'super' (23.3%) maize meal grades were the most common types produced by the millers (Table 1). The majority of maize millers (58.3%) have a milling capacity of 1 to 20 tonnes per day while those with a milling capacity of 20 to 40 or more represented only 41.6% of the millers. Thus, using the size classification provided by Wesley (2006) the majority of millers (58.3%) are relatively small in scale, which may entail a limited ability to take advantage of economies of scale prospects.

Constraints experienced by SMSMMEs in South Africa

Millers were requested to indicate the extents to which each item on a list of 13 general constraints was a predicament in their milling business. The possible responses were; (a) no problem; (b) fairly severe; (c) severe; and (d) very severe. The general constraints facing SMSMMEs in South Africa as identified by the millers is presented in Table 2.

The majority of millers (63.3%) identified high transportation cost as the major constraint affecting their milling business. This was followed by high maize price (51.7%). High cost of inputs whether in terms of high transport costs or high maize price might have direct impact on the running costs and hinder the competitiveness of SMSMMEs. This is because, although maize millers (large or small) face the same market prices for maize, SMSMMEs are more likely to be affected by high cost of inputs due to factors such as high operational costs coupled with their characteristically low credit facility. About 35% of millers identified brand establishment as a major problem while 23.3% identified consumer preference for large-scale, commercially packaged maize meal as a constraint. The problem of brand establishment

stems from the fact that maize meals from large-scale millers are already established names in households. For this reason, consumers are more likely to patronize them than the less popular meals from SMSMMEs. Since most SMSMMEs do not have recognised brands for their products it is difficult for them to break into a brand dominated market.

As a consequence, SMSMMEs are unable to compete in the maize milling market. Unfortunately, there does not seem to be a practical quick fix to this challenge. Government policies (23.3%) such as compulsory maize meal fortification and high taxes also featured as an important constraint facing SMSMMEs. In general, regulations such as compulsory fortification would impact more on SMSMMEs through increased maize milling expenses. To encourage this cadre of millers to implement policies such as the fortification regulation without adversely compromising their enterprises, Government ought to provide fortification equipment or appropriate financial assistance to them. Millers faced with the challenges of lack of adequate infrastructure represented 16.7 % of the population while 15% of millers considered a lack of suitable storage facilities as a major constraint to their business.

Surprisingly, only about thirteen percent (13%) of the millers identified financing and access to credit as a problem. Access to credit and finance would have been expected to top the challenges facing the SMSMMEs, given that various studies reported access and availability of finance as major problems for small businesses and enterprises (Judd and Lee, 1981; Beyene, 2002). Thirteen percent of the millers identified seasonality of maize grain as a constraint. This constraint is partly related to the problem of inadequate storage capacity. This is because during harvest season when maize is relatively cheap, SMSMMEs are unable to buy and store maize grains due to inadequate storage space.

This in turn makes SMSMMEs more susceptible than large-scale maize millers to seasonal fluctuations of maize. As a result, SMSMMEs are frequently placed at the harsh reality of the market. This hinders their ability to compete because they result to buying maize during off-season at high prices, thereby increasing their operational cost. Other less serious constraints identified included poor management practices (8.3%), old milling equipment (6.7%) and mill location (5%).

Conclusions

The study revealed that the major impediments to competitiveness of SMSMMEs in a deregulated South African maize milling industry in order of severity include; high transport costs, high maize prices, brand name establishment, consumer preferences for commercial packaged meal from large-scale mill and government policies. Other constraints identified include inadequate infrastructure, inadequate storage facilities, access to credit and seasonality of maize grains.

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Table 1: Profile of SMSMMEs in South Africa

(a) Types of production	Number of mills	Percentage of mills (N = 60)
Production milling	25	41.7
Production milling and Custom milling	35	58.3
(b) Types of meal produced		
Super	5	8.3
Special	18	30
Sifted	8	13.3
Super and special	14	23.3
Super and sifted	2	3.3
Special and sifted	11	18.3
All of the above	2	3.3
(c) Milling capacity (MC) [tonne/day]		
1-20	35	58.3
20-40	8	13.3
40-60	6	10.0
60 and above	11	18.3

N = number of mills.

Table 2: General constraints experienced by SMSMMs in South Africa

Constraints	No problem	Fairly severe	Severe	Very severe
Access to credit	6 (10)	34 (56.7)	12 (20)	8(13.3)
Brand establishment	5 (8.3)	17 (28.3)	17 (28.3)	21 (35)
Consumers preference for commercial packaged meal from large-scale mill	6 (10)	24 (40)	16 (26.7)	14 (23.3)
Business licensing difficulty	5 (8.3)	51 (85)	3 (5)	1 (1.7)
High maize grain prices	6 (10)	12 (20)	11 (18.3)	31 (51.7)
Seasonality of maize	20 (33.3)	23 (38.3)	17 (28.3)	8 (13.3)
Location of mill	9 (15)	38 (63.3)	10 (16.7)	3 (5)
Old milling equipment	7 (11.7)	35 (58.3)	14 (23.3)	4 (6.7)
High transportation cost	6 (10)	7 (11.7)	9 (15)	38 (63.3)
Poor management practices	17 (28.3)	30 (50)	8 (13.3)	5 (8.3)
Government policy	8 (13.3)	23 (38.3)	15 (25)	14 (23.3)
Inadequate storage facilities	9 (15)	31 (51.7)	11 (18.3)	9 (15)
Inadequate infrastructure	13 (21.7)	24 (40)	13 (21.7)	10 (16.7)

Figures in parentheses are percentages