

INSTITUTIONAL AND RESOURCE CONSTRAINTS THAT INHIBIT CONTRACTOR PERFORMANCE IN THE SMALL-SCALE SUGARCANE INDUSTRY IN KWAZULU-NATAL

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ABSTRACT

This study focuses on identifying constraints that inhibit sugarcane contractor performance in the small-scale sugar industry in KwaZulu-Natal (KZN). Information is drawn from a sample survey, conducted with 124 randomly selected contractors from 11 mill group areas of KZN between September 2002 and July 2003 and case studies of contractors, sub-committee members and development officers conducted in eight mill group areas. Results show that contractors face institutional constraints (work allocation limitations, lack of performance incentives and high transaction costs, such as negotiation costs, the risk of a loss in work and contract default risk), cash flow problems, poor physical infrastructure and a lack of labour. It is expected that the promotion of a more competitive small-scale sugarcane contractor sector will alleviate many problems (such as work allocation limitations) faced by small-scale contractors, while providing incentives for their provision of higher quality and cheaper services to small-scale sugarcane growers (SSGs). Government also has a role in strategising the creation of land markets while providing improved rural infrastructure (district roads). Government also needs to ensure unbiased tribal court rulings, review the impacts of minimum wage legislation on contractors sourcing labour, and provide protection for those competing for work.

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1. INTRODUCTION

Small-scale sugarcane growers (SSGs) form an integral part of the sugar industry in South Africa and contribute an estimated 15 percent to the total sugarcane crop. The viability of SSGs is important from both a rural development and economic perspective. Firstly, SSGs comprise primarily of previously disadvantaged black farmers who contribute to rural economic growth due to strong multiplier effects through the use of local contractor and labour services. Secondly, mills such as Amatikulu receive a high proportion of their sugarcane (approximately 25 percent) from SSGs (Le Gal & Requis, 1999). However, a serious drawback of the small-scale grower sector is the farmers' inability to efficiently plant, grow, cut and deliver cane to mills, considering the small size of their farms with an average of between 1,5 and 2 hectares of sugarcane (Le Gal & Requis, 1999). This is one reason for the emergence of small-scale sugarcane contractors.

Small-scale sugarcane contractors are generally SSGs, who provide essential mechanical tasks (land preparation, crop maintenance and cane haulage) (Wiseman, 2003) and/or labour (sugarcane cutting) contracting services to fellow SSGs. However, the productivity of these contractors (e.g., timely haulage operations, low downtimes, competitive charge-rates) has been low with costly delays in transportation of sugarcane and unreliability of the service (Sokhela, 1999). An improvement in the productivity of contractors in providing the services farmers need is expected to benefit contractors (lower costs and greater market share) and growers (higher quality services at competitive prices). Milling companies would also benefit through a more stable supply of higher-quality sugarcane to their mills.

The study includes data that were collected between September 2002 and July 2003 from 124 contractors, who were randomly selected from eleven sugar mill areas in KwaZulu-Natal. Contractors interviewed were all haulage contractors who have direct haulage (sugarcane haulage from field to mill) and indirect haulage (sugarcane haulage from field to loading zone) operations. The study also examines those institutions that are perceived by contractors, sub-committee members and development (extension) officers to have a negative influence on the productivity of contractors in the small-scale sugar industry.

It is hypothesised that the institutional framework in which contractors currently operate hinders their performance. Contractors are likely to face high transaction costs (e.g., *ex ante* costs such as contract negotiation costs, and *ex post* costs such as risk of contract default) and other constraints, such as cash flow problems and a lack of infrastructure, which have a negative impact on their operations. Good institutions, i.e. those reducing uncertainty and other transaction costs, are critical to promoting contractor productivity, and a need for institutional reform in the small-scale sugar industry has been identified (Le Gal & Requis, 1999; Wiseman, 2003). The formal entry requirements of a potential contractor sourcing work are discussed, while highlighting traditional or informal institutional impacts. Various factors (such as financial constraints, lack of competition and incentives, poor infrastructure) that currently have a negative impact on a contractor's performance are also evaluated. The paper provides policy recommendations, through analyses of survey data, case study information and pure observation on ways to improve both the productivity and viability of small-scale sugarcane contractors in KwaZulu-Natal. It is suggested that promotion of a more competitive industry, for example, by extension officers of the sugar industry and provincial government, may alleviate many of the constraints placed upon contractors.

2. AN OVERVIEW OF INSTITUTIONAL, TRANSACTION COST AND COMPETITION THEORY

New Institutional Economics (NIE) combines economic theory with institutional economics (Langlois, 1986: 5). Although the term NIE originated from Oliver Williamson (Coase, 2000), the original theory came from Coase's (1937) paper, *The nature of the firm*. The theory of NIE highlights transaction costs and the institutions promoted to lower them (Coase, 1937; Williamson, 1985). It also explains the evolution of institutions and assesses their economic performance, efficiency and distribution impacts (Kherallah & Kirsten, 2002).

Transaction costs are the costs, including risk, of negotiating and concluding a separate contract for each exchange transaction that takes place in the market. Also included are intangibles (e.g., searching for a SSG with whom to contract), and contract monitoring and enforcement (North, 1990). Arrow (1970, cited in Dorward, 1999: 480) defines

transaction costs as “the costs of running the economic system”. Transaction costs include *ex ante*, mostly fixed costs (e.g., drafting and negotiating agreements), and *ex post*, mostly variable (e.g., moral hazard) costs (Eggertson, 1990, cited by Zylbersztajn, 2003).

Institutions are seen as the “rules of the game” that shape human interaction and are put in place to reduce uncertainty. There are both formal (e.g., laws, markets, contracts) and informal (e.g., traditions, customs) institutions (North, 1990: 4). North (1990) points out that institutional theory and development begins with the individual human being for whom institutions are created. In the small-scale sugarcane sector in KwaZulu-Natal (KZN) this can only be made possible by understanding the relationships between contractors and SSGs within their environment. Regarding institutional change, Ruttan and Hayami (1984) highlighted an endogenous theory of institutional innovation from a demand point of view with a brief explanation of the supply of institutional change. Bardhan (1989), however, better explains the supply of institutional change while highlighting resistance to change in the form of vested interests and power struggles within collective action, itself being a barrier to institutional change. In the small-scale contracting sector there may be a demand for institutional change regarding contractors sourcing their own work, and organisations such as the South African Sugar Association (SASA) and the South African Sugarcane Research Institute (SASRI) may see benefits in promoting such change (supply). However, power interests within local associations and sub-committees may prevent this from happening. Unless potential losers are identified and compensated, changing the institutional environment may prove difficult because potential losers have the power to resist such change.

Beghin and Fafchamps (1995:288) state that “good governance relates to government policies and institutions which promote markets and efficiency, by defining the rules of the game which allow transaction costs to be reduced and so enlarge the effective flow of goods and services.” Furthermore, Hay (1993) says that the promotion of economic efficiency is one intention of competition. Sandmo (2000:7) defines this economic efficiency as an “achievement of efficient resource allocation” or capital flow to sectors of production where the rate of return is highest. He further states that the aim of policy makers should be to

reduce prices to competitive levels, something that is only possible through the promotion of a competitive market.

Porter's five-forces model (Porter, 1985) identifies five forces that affect a contractor's competitive state in a free market system: suppliers of key inputs, substitute products, potential new entrants, customers, and rivalry between competitors. Another important aspect to consider in a competitive market is the role of consumer (SSG) demand linked to product value. Kennedy, Harrison, Kalaitzandonakes, Peterson and Rindfuss (1997) define customer value as the perceived value of a product's "bundle of benefits" relative to the price paid for the product. For a contractor to be competitive, this ratio needs to exceed that of his rivals. In the small-scale contracting sector in KZN there may be limited options for differentiation (hauling other products such as timber or water), and low-cost leadership may prove to be the defining factor for determining a contractor's competitive advantage. Kennedy *et al.* (1997) maintain that cost competitiveness depends on variable costs (fuel, repairs and maintenance), sunk costs (larger investments such as specialised capital, e.g., cane carting equipment) and transaction costs (including risk). Good institutions, in part, are those that facilitate a competitive market while aiding a reduction in transaction costs.

3. DATA SOURCES AND CHARACTERISTICS OF RESPONDENTS

Data were obtained from a survey conducted by Joint Venture³ and mill extension staff that interviewed 124 small-scale sugarcane contractors between September 2002 and July 2003. The study area includes eleven of the main small-scale sugarcane grower areas, namely Amatikulu, Entumeni, Eston, Felixton, Gledhow (including Glendale), Maidstone, Noodsberg, Pongola, Sezela, Umfolozi⁴ and Umzimkulu. Contractors that were interviewed included those randomly selected with replacement. The sample was drawn using a constant sampling fraction with the population being stratified. Stratification categories included

³ *Staff from both the South African Sugarcane Research Institute and the KwaZulu-Natal Department of Agriculture and Environmental Affairs who are currently working in partnership.*

⁴ *The Umfolozi contractors were selected at random by mill extension staff operating in the area.*

three topographical levels and whether a contractor conducted direct⁵ or indirect⁶ haulage tasks. Characteristics of sample respondents are shown in Table 1. Furthermore, due to the low occurrence of contractors transporting high tonnages, all those contractors who were listed as transporting more than 10 000 tons of sugarcane per year were included in the sample (a total of 10 observations).

Table 1: Characteristics of sample small-scale sugarcane contractors in KwaZulu-Natal, 2002/03 (n=124)

Characteristic		Education distribution (%)	
Age in years (mean)	52.4	No education	17.1
Experience in years (mean)	9.9	Grade 8 or less	39.0
Proportion of females (%)	13.1	Grade 9-11	18.7
Other sources of income (%)	77.4	Grade 12	19.5
Other skills (%)	53.2	Tertiary	5.7
Tons transported/year (mean)	6 295		
Tons transported/year (mean)*	4 757		

* Excluding contractors transporting more than 10 000 tons per year.

Case studies were also conducted in eight small-scale grower areas to obtain the views of contractors, sub-committee members and development (extension) officers on institutional issues. The areas are distributed over the KwaZulu-Natal coastal and inland regions, including four Illovo mill areas (Eston, Sezela, Gledhow and Glendale) and four Tongaat-Hullett mill areas (Amatikulu, Maidstone, Entumeni and Felixton). Included in the interviews were contractors, members of sub-committees (locally organised groups of SSGs in small-scale sugarcane growing areas) and development officers. Case study interviews, both in person and by phone, were conducted between September 2002 and February 2004.

⁵ Direct haulage entails hauling sugarcane from the field to the mill.

⁶ Indirect haulage involves hauling sugarcane from the field to a loading zone.

4. INSTITUTIONS INFLUENCING SMALL-SCALE CONTRACTOR ENTRY⁷

In each study area, contractors enter the industry by way of similar methods. Differences in contractor entry do occur across areas, but the following sections highlight the common channels. Authorities and influential bodies within the industry, such as sub-committees (organised groups of SSGs in grower areas), local associations (representing the interests of all SSGs in their local mill areas and consist of local sub-committee members) and milling companies, do not formally recognize contractors who source work through channels that do not involve the sub-committees and/or local associations. However, only 41 percent of sample contractors had either sub-committees or local associations involved in their hiring. Fifty-three percent indicated grower involvement alone, while seven percent of respondents specified both grower and sub-committee/local association involvement. This indicates that over one-half of sample contractors do not view sub-committee and local association involvement in contractual matters, such as the signing of contracts/cessions, as significant as grower involvement, even though sub-committees allocate the tonnages for haulage to contractors. In some areas the sub-committee has no involvement in the signing of cessions although cessions still need to pass through sub-committees to local associations or milling companies.

Organisational structure influences the extent to which channels through which potential contractors enter the industry are formed. The organisations in the small-scale grower sector differ from those that are found in the commercial farming sector. Where commercial sugarcane growers are in direct contact with the Local Grower Council, small-scale growers operate via a different channel, namely through their respective sub-committees, local associations and mill cane committees (see Figure 1).

Figure 1 shows that SSGs are in contact with their respective sub-committees and contractors, not the Local Grower Council. The sub-

⁷ *Section 4 includes information from sample survey and case study observations. Referencing is generally excluded from the text due to many individuals providing similar information.*

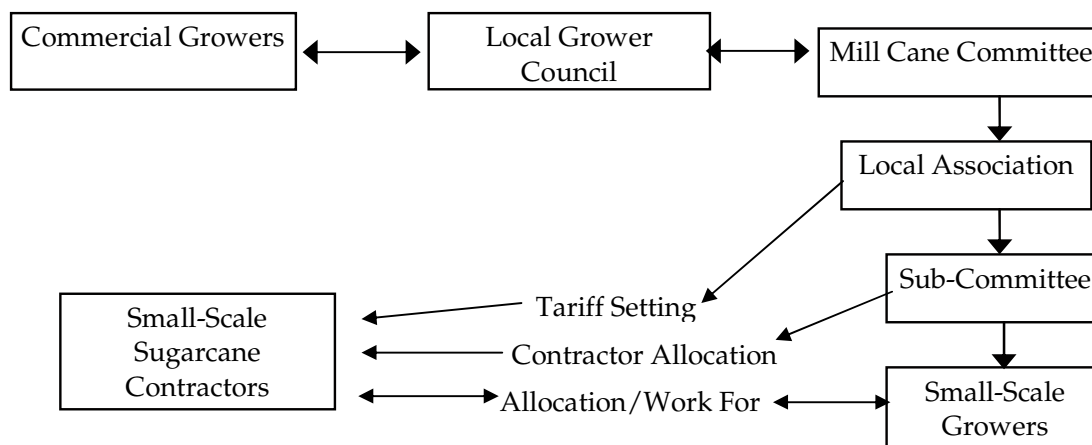


Figure 1: Organisation of small-scale sugarcane growers and contractors

(Source: Adapted from Le Gal & Requis, 1999: 4)

committees are made up of and represent SSGs from sub-locations within each mill area, while the contractors are individuals that serve the SSGs. Not all areas have the same organizational structures, as some do not acknowledge local associations as having a right of influence over the sub-committees.

4.1 The sub-committee’s role in sugarcane allocation to contractors

Although sub-committees are locally organised groups of SSGs in each grower area it should be noted that due to most contractors being SSGs themselves, they are not excluded from sub-committee nomination. Regarding contractor entry, the first responsibility of the sub-committee is to ensure that contractors entering the industry have the necessary equipment (tractors, trailers), and that there is available tonnage to haul. They also need to ensure that contractors operating in their area are registered with the local association. Secondly, they act on behalf of all SSGs in the area, and will allocate contractors to individual SSGs (the number of SSGs greatly exceeds the number of contractors). A facilitator, appointed in each sub-committee, is the individual who takes charge of the allocation of work. The sub-committee also mediates cession forms signed by SSGs and contractors. Following the signing of cessions, the sub-committees will send them to the mill or local association. In 2003, the South African Cane Growers’ Association (SACGA) and Tongaat-Hulletts began a programme in the Maidstone

area whereby the Regional Cane Delivery Forum (RCDF) adopted the function of SSG cane allocation to contractors, previously administered by sub-committees. The RCDF has a code of conduct to be followed by all contractors operating in the area. Many sub-committees do not have a code of conduct, so unproductive contractors continue to be part of local associations.

4.2 The local association's role in contractor registration and setting charge-rate guidelines

Local associations represent the interests of all SSGs in their local mill areas and consist of members from the numerous local sub-committees. The development of a local association often depends on the area's tribal structure (e.g., Felixton, Gledhow and Glendale) where each local association is representative of a single chief's area. This is done to minimise conflicts between different tribal members. Local associations are recognised by the industry as authoritative bodies and it is compulsory for contractors to register with them (Harding, 2003). Although direct contact with contractors is limited, the associations will receive applications from contractors for registration purposes. The associations will then need to register them, after which the contractors become part of the local association (most contractors would already be registered as SSGs). Registration aids payment whereby contractors are given contractor numbers that are used to identify the contractors responsible for hauling every load of SSG sugarcane. As mentioned previously, these numbers are forwarded to the respective mills that pay accordingly (i.e., each SSG's load sent to the mill includes his contractor's number; the contractor is then paid by the mill out of the SSG's pay cheque). The local association also provides contractors with charge-rate guidelines for hauling SSG sugarcane. They are assisted in this matter by milling companies and regional economists. Rates are not set according to supply and demand for contractor services, but are estimates (not dependent on contractor costs). In some areas rates are merely increased by accounting for inflation (e.g., Amatikulu).

4.3 The contractor's role in sourcing work

Wiseman (2003) states that most contractors are themselves SSGs and become contractors for two main reasons. The first is a need to diversify, while the second is the existence of low quality contractor

services (untimely haulage operations), a major cause of frustration for growers relying on them. Although different mill areas use slightly different methods, the basic steps taken by potential contractors to be recognised and receive work are as follows. Firstly, potential contractors need to approach the sub-committee to which they want to be affiliated (in some areas, local associations are approached first). This would normally be a sub-committee in their own communities, but contractors have also been found operating in other areas. These are normally close, or adjacent, to their own areas. At this stage, the sub-committee checks a contractor's machinery and available tonnage is totalled to see if work is available. Sub-committees expect potential contractors to only purchase machinery following the acceptance of their applications to do contract work. However, this rarely occurs, and contractors normally purchase their machinery before any consultation with the sub-committee is made in the hope of getting contract work.

Once potential contractors are recognised by their sub-committees (through word of mouth) they need to register as contractors and get a contractor number (this finalises registration of the contractor with the local association). This is done through the local association in conjunction with the milling company. The milling company will then use the numbers to identify those contractors hauling sugarcane to the mills or zones for each grower. Registered contractors will be allocated SSGs to haul for, and both parties will sign cessions (the cessions remain binding for a single season and signing of cessions re-occur every year even if the grower uses the same contractor). This normally occurs at least once a month with different SSGs (as found in the Sezela area), but varies according to the preference of the sub-committee. The signing of cessions can re-occur randomly for some SSGs when their contractors have breakdowns and haulage has to be reallocated. Some mill areas have alternatives to cessions - for example, at the Glendale mill, cessions are not required, as contractors and corresponding SSGs are entered directly onto computer. When a contractor has work (this is allocated by the sub-committee) he is expected to complete that to which he has agreed. Work, however, is not always completed due to reasons both beyond (e.g., rain delays and mill breakdowns) and within (e.g., equipment downtime) the control of the contractor. When contractors have completed their allotted work, they receive guaranteed payment from the milling company in the form of a deduction from the SSG's pay cheque.

The next section briefly highlights customary influences on the sugar industry, a core issue given the tribal influence on SSG and contractor operations in tribal areas. It lists factors inhibiting contractor performance in the small-scale sugar industry. These factors are identified from examining organisational structures, contractor work sourcing channels and customary influences.

5. CUSTOMARY INSTITUTIONS INFLUENCING SMALL-SCALE SUGARCANE FARMING IN KZN

Customary law and tradition have great influence on the “rules of the game” in the small-scale sugarcane industry sector. Firstly, the origin of many small-scale sugar industry problems is believed to be the land tenure situation in tribal areas of KZN (Wynne, 2003). The SSGs need to employ contractors because it is not feasible to invest in the necessary tractors or machinery, due to the small size of their farms. The small farm size is the product of tribal land being allocated to households in the area without extending enforceable tenure rights. Land purchase or rental markets therefore are imperfect for rural area land-users. This places a restriction on, for instance, more productive SSGs because they cannot rent in or purchase land. Thus, SSGs remain small despite the associated constraints, such as diseconomies of size. Also, much land lies idle and uncultivated, which is the result of an imperfect rental market (Fenwick & Lyne, 1999). Many SSGs are exiting the sugar industry (Wiseman, 2003), and the allocation of their land to other, more productive SSGs may consolidate land in SSG areas and promote their long-run viability.

A further problem associated with the lack of land rights is the inability of landowners to use their land as collateral for loans because tribal owned land cannot be repossessed or sold (Fenwick & Lyne, 1998). Land would only have collateral value under a sale market or long-term lease market. Furthermore, title deeds do not have value and so do not solve the land tenure problem except when they assist market transfers (Fenwick & Lyne, 1999). While the land issue is of great importance, it lies beyond the control of those directly involved in the sugar industry, namely the milling companies, SASA and SACGA. Although involvement by sugar industry players is necessary, overall responsibility rests with both the government and tribal authorities, highlighting a need for institutional change (tribal land market

institutions) that could promote the viability of small-scale contractors beyond the “confines” of the sugar industry.

Thomson (1996) highlights potential steps in addressing the land tenure problem. These are (1) to gain support from the tribal authority by communicating potential advantages of a land market to them; (2) to identify what market constraints exist and then address each of these individually, i.e. insecure tenure, risk perceptions, or a combination of both; (3) to provide education that promotes institutional change and offer extension to facilitate land transactions, helping to reduce transaction costs faced by lessors and lessees; and (4) to provide institutional support in the form of monitoring the growth of the rental market and disputes between vested interest groups.

Another impact of customary law is the method of settling disagreements. The sample of contractors suggests that only 36 percent settle disagreements privately, while 61 percent indicate that some form of group settlement is necessary (i.e. through sub-committees, associations, mill extension). Individuals are often either afraid or do not have the status or authority within their community to state their grievances with effect. For example, Bruce (1989) indicates that over diverse cultural settings, women, specifically widowed or single women, have a substantially lower social status than men. Wiseman (2003) confirms this for KZN by adding that, due to tradition, societies in the rural areas of KZN are patriarchal in nature. It is therefore expected that women would face greater legal uncertainty and thus higher transaction costs. Lyne (1996) also identifies this issue, stating that individuals having weak social status, in this case women, often face greater legal uncertainty when compared to the rural elite.

Because contractors live in the same communities as both their growers/clients and competitors, promoting a competitive industry may prove difficult. This has also greatly influenced work allocation by sub-committees, as some have indicated that their work allocation is not dependent on the service quality of a contractor, but rather on work allocation equality for contractors from the sub-committee’s perspective. Due to the influence that traditional authorities (chiefs, elders) have in the small-scale sugarcane areas of KZN, it may be prudent that these authorities be included in any institutional change process. Thomson (1996: 83) found the inclusion of credible leaders,

such as chiefs and tribal councils, extremely important in bringing institutional change to the tribal areas. Good leaders may play important roles in upholding contractual obligations and enforcing land rights where government intervention may fail (enforcement in remote areas may be difficult for government officials due to a lack of personnel and legal infrastructure, such as rural courts).

6. FACTORS INHIBITING SMALL-SCALE CONTRACTOR PERFORMANCE IN KZN

Institutions of the small-scale sugar industry exist to decrease an individual contractor's exchange and production costs by giving some structure to their interaction with SSGs, competitors and authoritative bodies such as sub-committees and local associations. The following are factors that constrain contractor performance in the industry; they are based on both the sample survey and case studies. These factors are not ranked and are listed in no specific order.

6.1 High transaction costs

Observations show that *ex ante* transaction costs faced by contractors, with respect to sourcing contract work, are high. The involvement of both sub-committees and associations leave contractors with much "red tape" and costs to manage (negotiation costs that include application for membership, approval and contract arrangements) over and above those faced by commercial contractors. Furthermore, due to the small size of growers, contractors need to find approval for many cessions, which adds to their transaction costs (sample average was 121 SSGs per contractor). Nevertheless, there are savings for contractors as they are assigned SSGs/clients, and therefore do not have to search for them. The risk of losing haulage work is also relatively high for contractors (even though 60-70 percent are normally assigned into the next year), as work allocated in one year is not necessarily allocated in the next. This not only creates uncertainty regarding work for the future, but also limits access to current loans, as lending institutions generally view contractors as short-term, and therefore high-risk, clients that cannot service long-term debt. Contractors have also mentioned the decreased amount of work allocated over recent years. This may be attributed to the recent drought, although, as with preceding drops in allocation, it could be the joint result of a declining number of SSGs and an over-

supply of contractors (more than a free market would allow, where contractors have enough haulage work to take advantage of economies of size, allowing for competitive charge-rates). *Ex post* transaction costs are increased through the risk of contract default in the presence of legal uncertainty, especially for women contractors (of lower social standing) who make up approximately 13 percent of the total number of contractors.

A New Institutional Economics approach endeavours to reduce transaction costs faced by contractors through institutional reform and would look for incentive compliant arrangements for improving contractor performance. This would not only involve decreasing the number of channels through which contractors need to go in order to attain work, but may also include provision of physical (roads) and legal (ensure similar standards for lower status individuals) infrastructure, information and education (Matungul, Lyne & Ortmann, 2001).

6.2 Limited access to medium-term finance

With cessions being limited to one year, formal lending institutions see contractors as temporary entities. This is understandable, as contractors are never guaranteed work for the following season and although commercial contractors face the same problem, their historical records reflect performance, which is not the case for small-scale contractors. This situation strengthens the perception of small-scale contractors as high-risk clients, since uncertainty is heightened in the minds of lenders regarding a contractor's ability to service medium-term debt. With contractors sourcing loans for specialised equipment such as cane loaders and cane trailers, lending institutions doubt whether even a movement to another agricultural sector is possible in the event of a loss of sugarcane contracting work. Nevertheless, a good credit history may prove useful for contractors having sourced finance in the past.

6.3 Business cash flow problems

The inability to use land as collateral by SSGs operating in the tribal communities is a major limitation to raising loans. Furthermore, for current contractors, cash flow problems, due to payment delays, amplify an already precarious monetary situation. Wiseman (2003)

states that contractors may have to wait for up to two months to receive payment for their services. This causes cash flow problems, particularly at the beginning of the cutting season. Cash flow problems may also be attributed to injudicious financial planning, as funds should be saved from the previous season. This problem could be alleviated, as it is believed that payment within seven days to SSGs and therefore contractors may be possible (Wiseman, 2003).

6.4 Differences in relative bargaining power, and lack of customer (SSG) contact

Women in rural KZN have less bargaining power than men within their communities, due to their lower social status. A large proportion of SSGs are women, while most contractors are men. Therefore, a problem may exist in which contractors have greater bargaining power, which is amplified through the high SSG to contractor ratio. Wiseman (2003) indicates that this also influences price setting, as the bargaining power of contractors also carries through to these negotiations. Weak social status would not be limited to women, but also to men through the traditional hierarchical system, i.e. those with more authority are chiefs, traditional council members, elders, and long-standing community members (Berry, 1993; Fenwick & Lyne, 1998). This sets a double standard in transaction costs faced by different members within a community, thus hampering competition amongst contractors. For example, Norton (2003) stated that an authoritative figure from an undisclosed community posed a threat to the lives of other contractors who had entered his area seeking to expand their contracting business. Although community members acknowledged that the other contractors were better performers, the bulk of available work remained with the authoritative figure due to allocations being subjective.

Regarding grower contact, the first step formally taken by contractors is not to approach the SSGs whom they are to serve, but rather the sub-committees. The sub-committee may consist of one or more SSGs whom the contractor may serve, but would exclude the majority of his customers. Throughout the entire process, from industry entry to payment, formal contact between contractors and their customers (SSGs) is limited, except when cessions are signed. Customer preferences are not signalled through these administered transactions, which highlights a need for contractors to establish closer ties with the

SSGs in order to identify customer needs and thereafter provide services of higher quality (i.e. timely services, acceptable charge-rates). It can be expected that a good relationship between contractors and SSGs would improve contractor performance and service to growers.

6.5 Limitations on growth of business size

Ninety-one percent of the sample contractors said that they wanted to increase the tonnage they transport (Table 2). However, 72 percent indicated that this would be possible. Only 52 percent said that they needed more machinery to do so, which indicates that there are other constraints on business growth, such as the work limitations placed upon contractors through tonnage allocation. However, the need for more machinery probably indicates that the quality of machinery currently in use by contractors is poor. Although many contractors are hauling low tonnages, additional tractors are needed on standby to ensure haulage continues in the event of a breakdown.

The administrative allocation of work by sub-committees shows immediate problems with regard to work limitations for contractors and with no exit mechanism for inefficient contractors, quotas are getting smaller. Furthermore, the guarantee of work, although limited, would be a contributing factor to the lack of performance incentives and competition. Given that machinery utilization would be a key factor for successful contracting, the ability to expand or grow such business becomes extremely important if size economies are to be achieved.

Table 2: Potential for increased work tonnages of sample contractors, 2002/03 (n=124)

Response	Can increase tonnage (%)	Would like to increase tonnage (%)	Need more machinery (%)
Yes	72	91	52
No	28	9	48

6.6 Lack of competition and performance incentives

Institutional barriers currently inhibit competition in the small-scale sugarcane contractor sector in KZN. One barrier is the control of work

allocation exercised by sub-committees. Work allocation not only inhibits business growth but also prevents competition. Furthermore, charge-rate guidelines, normally followed closely by contractors (most of whom lack own cost information), also inhibit competition. Wiseman (2003) states that rates are determined by allowing for the viability of all operating contractors, including those hauling low tonnages, regardless of actual contractor costs or service quality. Small-scale growers are then faced with higher than market charge-rates and in some cases these rates are nearly double those charged by commercial contractors. Wiseman (2003) further states that restructuring needs to take place in order to ensure that contractors entering the industry do not exceed the number needed, i.e. the number determined by the market demand for contractors. Some contractors are lured to contracting for reasons of status or recognition rather than money. A competitive contracting market would eliminate high cost and poor-performing contractors.

The potential sources of a contractor's competitiveness need to be identified. Firstly, diversification may be an option in that contractors may offer other services (e.g., hauling timber and water), which would improve economies of size and, therefore, overall returns. Improved services may be a second option, such as consistently providing a reliable haulage service. An important benefit of contractor competition for SSGs would be lower cost services. However, contractors are faced with a limited customer target market, due to the high costs associated with the delivery of services outside of their own area (high cost of transporting their tractors). This may only prove profitable if contractors can charge a premium price, an unlikely event given the alternatives open to SSGs (i.e. access to commercial contractors, and local contractors offering similar services).

6.7 A lack of suitable labour

The lack of labour poses a problem for some small-scale contractors. Few labourers are needed for machinery operations (driving tractors, cranes, cane loaders, etc.), but a large number of labourers are required for sugarcane cutting tasks. Many haulage contractors are involved in cutting sugarcane, which allows for diversification of their businesses. Although only 17 percent of sample contractors directly referred to a low availability of labour, there is a concern about the relatively more attractive higher wages in the commercial sector (now paying minimum

wages that far exceed those paid by small-scale labour contractors) and the impact of HIV/Aids, which negatively effects labour productivity. Some contractors travel up to 20 kilometres away to source labour.

6.8 Poor rural infrastructure

Although institutions in the small-scale contractor sector encompass the “rules” by which contractors interact, for market forces to function, i.e. with lower transaction costs, adequate physical infrastructure needs to be in place (Timmer, 1992, and Sahn & Sarris, 1994; both cited by Fenwick and Lyne, 1999). The study sample suggests that 76 percent of contractors see the lack of infrastructure as a problem that increases not only transaction costs (Fenwick and Lyne, 1999) but also their basic haulage costs via increased wear and tear on machinery and increased fuel usage. Further losses occur through decreased access to available tonnages in secluded fields. Wiseman (2003) calls for urgent intervention by government to improve road infrastructure in the small-scale sugar industry. Furthermore, adding to the severe effects of poor infrastructure, sugarcane fields in remote areas of the industry add to the costs faced by contractors. Observation shows that fields are often inaccessible due to harsh terrain (steep slopes).

7. CONCLUSIONS AND POLICY RECOMMENDATIONS

Access to contract work remains limited for better performing sugarcane contractors in KZN due to the administrative allocation of work by sub-committees (or in the Maidstone area, by the RCDF). These institutions remove performance incentives by setting prices and allocating work subjectively. Small-scale growers do not have bargaining power and so penalties for contractors providing a poor service do not exist (a competitive market would solve this problem by eliminating poor performers). Instead of reducing transaction costs, current institutions, such as administrative organisation, increase costs by adding unnecessary channels through which contractors need to proceed. Seemingly an obvious problem and widely discussed in the small-scale sugarcane industry, tonnage allocation remains a constraining factor on contractor business growth. This problem gives rise to the need for institutional reform aimed at promoting competition.

Contractors and SSGs need to interact more in addition to the signing of cessions. This would allow SSGs to communicate their “product value” expectations (e.g., timely haulage expectations) to contractors. For example, a contractor’s untimely haulage operations negatively affect a grower’s income via lower Recoverable Value (RV) payments (farmers’ payments are based on the quality sugar content of sugarcane delivered to mills). Growers need to be able to communicate their grievances to the contractors if performance improvements are to be promoted. A solution may be for SSGs to choose their own contractors within a competitive sector where poor service providers would have the potential for exclusion from selection.

Changes in payment terms for contractor services are necessary in that contractors need to be more motivated to ensure that sugarcane reaches mills before RV levels drop. Thus, payments to contractors based not only on tonnage delivered, but also on RV, may reduce haulage delays. For example, the payment system may be based partly on RV and partly on tonnage depending on industry requirements. However, if this payment system were to be adopted, delivery of low quality cane by contractors would decline unless premium prices were paid to cover the extra haulage costs. Contractors may be justified in charging higher prices for harvesting poor cane. This may inevitably drive SSGs that produce low quality cane from the industry, further highlighting the need for a land (rental) market allowing high quality cane producing SSGs to rent in more land. Also, due to contractors having limited access to finance and a high liquidity preference (continuing operations with respect to fuel and repairs), earlier payment for their service needs to be seriously considered by milling companies. This is possible, as information on which contractor delivered the cane and the value of cane delivered is said to be available well within the one to two month payment time. Less delay in haulage payments would be highly beneficial to contractors in providing liquidity to fund day-to-day operations. Introducing this type of payment scheme may require preliminary adoption of a reduced payment delay (i.e. three to four weeks), with additional decreases (i.e. two weeks) being considered for the future, so as to allow mills to accustom themselves to quick payments (computer systems may need adjustment and staff trained to deal with shorter payment schedules). Although a payment system may need to be laid out for contractors, eventually market forces would decide upon charge-rates with contractors competing for work.

Regarding a competitive contractor sector, note must be taken of the bargaining power of contractors compared to SSGs. Policy makers must not overlook this relationship as short-term abuse of bargaining power over SSGs may result if contractors are to be allowed to set their own prices. In the long run, however, prices would be driven down by competition amongst contractors, especially after the size expansion of contractors and them taking advantage of economies of size (lower average cost per ton). The development of a competitive sector may be realisable, in that the situation already exists in Mpumalanga (Komati and Malelane) where commercial contractors, some being SSGs themselves, are contracting to SSGs under competitive conditions.

Before discussing potential steps in moving towards a competitive sector, it is necessary to mention those contractors who may lose with regards to own vested interests and power relations, i.e. those that would oppose institutional change. Firstly, many contractors may need to exit the industry with their work being taken up by more productive contractors (quality service providers regarding timeliness and charge-rates). There is no indication of this number; however, most contractors may need to more than double their haulage levels to at least 10 000 tons to break-even. This implies that a potential drop of 50 percent of currently operating contractors may occur. Others with vested interests would be those in authoritative positions on local associations and sub-committees. However, these institutions may still be useful in providing information, for contract monitoring and/or contract enforcement. Further costs would be faced by, for example, milling companies where computer administration would have to change in the form of new computer programs and staff training. This may, therefore, also invoke some resistance to change.

Potential steps in moving towards a more competitive contractor sector include:

- Allow contractors to source their own work. Contractors do not have to work through channels to get jobs beyond personal dealings with the SSGs. Also, a milling company payment scheme is not necessarily needed, although this may guarantee payments to contractors.

- Current extension services (joint venture and milling company) need to communicate the benefits of competition to both SSGs and contractors (lower charge-rates through cost cuts by contractors, improved service quality for SSGs, ability to expand contracting business and make use of economies of size for contractors, and freedom to choose clients).
- The authority of associations and sub-committees should be limited to the provision of information, mediation and arbitration of disputes, and contract enforcement, despite the vested interests of individuals within these authoritative positions.
- Make allocated tonnages transferable between contractors at prices set by contractors themselves. This would move current allocations to more efficient contractors willing to pay the highest price per transfer.
- Any support (information, extension advice) that contractors need should be provided by extension services already in place. If the request for information exceeds what can be provided, charges need to be made to reduce the training/information requirements to levels that are deliverable (this will promote more efficient allocation of resources, such as information inputs, to better performing contractors).
- A short-term solution to contractors determining charge-rates may be to provide a list of potential charge-rates or price information (by extension services) of all contractors in an area (this may be the sub-committee area or wider depending on distance costs to contractors). This could drive charge-rates down, as SSGs will likely try to source the lower cost providers.
- It needs to be clearly communicated to SSGs that contractors are service providers and that the SSGs are their customers. There must be a demand for high quality service in order to drive service levels up to acceptable standards (i.e. a more competitive industry structure will improve service quality by contractors jockeying for competitive advantage). This does not occur at present because SSGs are allocated to contractors and therefore are not voluntary clients.

In effect, those contractors who are not cost effective and/or deliver poor quality services may exit the market leaving least-cost provider contractors in the industry. However, competition might be limited to contractors within the same areas, as delivering such a service over a wide geographical area may prove too costly for contractors.

From a development perspective, it would take time for the remaining small-scale contractors to reach commercial levels of competitive advantage, i.e. commercial charge-rate levels and commercially acceptable standards of service. It may, therefore, be necessary to protect areas where commercial contractors have access, in the short-term, to prevent the small-scale contractor sector from collapsing (i.e. leave authority of area, not individual, allocation to sub-committees in the short-term so contractors compete only amongst themselves in their own areas).

Porter (1985) outlines an essential approach for contractors operating in a competitive sector. It would be necessary for contractors to guarantee sources of key inputs (e.g., a continuous supply of fuel for day-to-day operations, and readily available repair services). Contractors would need to be able to compete with fellow small-scale contractors and commercial contractors, and to deter potential new entrants by building up a competitive advantage (e.g., ensure services are of a high standard (timely operations) and that prices are competitive). Contractors need to be aware of an expected increase in the bargaining power of SSGs as the SSG's ability to change contractors would be increased in a more competitive market.

The government may have a role in improving small-scale contractor performance through a change in government policy and institutions. Firstly, government could consider creating formal land markets under informal constraints (tribal authority), in partnership with those directly involved in the sugar industry (SASA, milling companies, SACGA). Thomson's (1996) steps in addressing the land tenure problem may be an approach that could be used by both government and others involved in the industry.

Secondly, government needs to direct more funding towards improving rural infrastructure, such as roads, which would reduce haulage costs and improve communication. Groups of SSGs (e.g., sub-committees)

could invest in road maintenance equipment (subsidisation by government may be required) and maintain infield roads for those in their area. District road maintenance would remain the responsibility of government. Furthermore, it may also be necessary for extension staff to advise potential SSGs to avoid planting sugarcane in remote areas, as contractors under a competitive situation may not be willing to haul their sugarcane.

Thirdly, government needs to ensure that tribal courts do not run a dual system of decision but that all contracts are enforced consistently regardless of social status, i.e. there needs to be monitoring over tribal rulings and places of appeal for those with grievances regarding these rulings. Fourthly, labour legislation should be seriously reconsidered regarding the minimum wage bill, as many small-scale contractors simply cannot pay the legal wage to their unskilled labour, due to their already high operating costs (high transaction costs, diseconomies of size). Lastly, protection of those competing for work needs to be made available. "Mafia" type behaviour and abuse of authority in communal areas need to be severely dealt with by law enforcement officers.

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