

# INSTITUTIONAL AND RESOURCE CONSTRAINTS THAT AFFECT SMALL-SCALE SUGARCANE CONTRACTOR PERFORMANCE IN KWAZULU-NATAL

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## Abstract

This study aims to identify constraints that inhibit the performance (such as timely haulage operations, cost effectiveness) of sugarcane contractors in the small-scale sugar industry in KwaZulu-Natal (KZN). Information is drawn from both a sample survey, conducted with 124 randomly selected contractors from 11 mill group areas, and case studies (concerning institutional issues such as organisational structures) of contractors, sub-committee members and development officers, conducted in eight mill group areas of KZN between September 2002 and February 2004. Sample statistics and case study 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 concluded that the promotion of a more competitive small-scale sugarcane contractor sector will alleviate many of the problems (such as work allocation limitations) faced by small-scale contractors, while providing incentives for the provision of higher quality and cheaper services to small-scale sugarcane growers. Government has a role in strategising the creation of land markets and 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.

*Keywords:* sugarcane, SSG, small-scale sugarcane contractors, growers, institutions, constraints

## Introduction

In the South African sugar industry small-scale sugarcane contractors, normally small-scale sugarcane growers (SSGs) who have purchased haulage tractors and trailers, provide essential mechanical (land preparation, crop maintenance and cane haulage tasks) (Wiseman, 2003) and/or labour (sugarcane cutting) contracting services to fellow SSGs. The productivity (timely haulage operations, low downtimes, competitive charge rates) of these contractors is, however, low, causing costly delays in transportation of sugarcane and unreliability of the service (Sokhela, 1999). Improving the productivity of contractors can benefit them via lower unit costs and higher profitability, and will also benefit SSGs via higher quality services at competitive prices, and milling companies by promoting a more stable supply of higher quality sugarcane to their mills.

It is hypothesised that the institutional framework in which contractors currently operate hinders the provision of an efficient service to SSGs. Contractors are likely to face both 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 (e.g. cash flow problems, a lack of infrastructure), which will have a negative impact on their operations. Good institutions (i.e. those that reduce uncertainty and other transaction costs) that influence individuals (contractors, SSGs) in the small-scale sugarcane industry are critical to promoting contractors' productivity, and a need for institutional reform in the small-scale sugar industry has been identified (Wiseman, 2003; Le Gal and Requis, 1999).

This study examines those institutions that are perceived by contractors, sub-committee members and development officers to have a negative influence on the productivity of contractors in the small-scale sugar industry. It discusses the formal entry requirements of a potential contractor sourcing work, while highlighting traditional or informal institutional impacts. Various factors such as financial constraints, lack of competition and incentives, and poor infrastructure, that currently have a negative impact on a contractor's performance, will also be evaluated. Policy recommendations are provided in an attempt to alleviate the constraints placed on contractors, and suggestions are made to promote a more competitive industry.

### **Overview of the theory on transaction costs, institutions and competition**

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) 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 in Zylbersztajn, 2003).

North (1990) states that the existence of institutions can be explained through a joint understanding of human behaviour and transaction costs, with the costliness of information being the key to transaction costs. Institutions are seen as the 'rules of the game' that shape human interaction. Institutions are put in place to reduce uncertainty by organising this interaction. The theory of New Institutional Economics highlights transaction costs and the institutions promoted to lower them (Coase, 1937; Williamson, 1985). These same institutions can, however, impact negatively on individuals by forming constraints on potentially positive human interaction, e.g. dissuading otherwise healthy competition in an economy.

There are both formal and informal institutions. Formal institutions are the rules devised by policy makers, whereas informal institutions are merely conventions and codes of behaviour. Policy makers have limited ability in influencing informal institutions, but play a major role in deciding upon formal institutions or the rules by which individuals need to interact (North, 1990). North says 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.

Beghin and Fafchamps (1995) 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) 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.

### Sampling method and characteristics of respondents

The sampling method is summarised in Nothard *et al.* (2004). For this study, the 10 contractors from Umfolozi are included, bringing the sample size to 124. There are no significant changes in the characteristics of respondents, as shown by Table 1.

Case studies to get the views of contractors, sub-committee members and development officers on institutional issues were conducted in eight small-scale grower areas. The areas are distributed over KZN coastal and inland regions, and include four Illovo mill areas (Eston, Sezela, Gledhow and Glendale) and four Tongaat-Hulett mill areas (Amatikulu, Maidstone, Entumeni and Felixton). Included in the interviews were contractors, sub-committee (locally organised groups of SSGs in small-scale sugarcane growing areas) members and development officers. Case study interviews were conducted between September 2002 and February 2004.

**Table 1. Characteristics of sample small-scale sugarcane contractors in KZN, 2002/03 (n=124).**

Characteristic		Education distribution	
Age in years (mean)	52	No education (%)	17
Experience in years (mean)	10	Grade 8 or less (%)	39
Proportion of females (%)	13	Grade 9-11 (%)	19
Other sources of income (%)	77	Grade 12 (%)	19
Other skills (%)	53	Tertiary (%)	6
Tons transported annually*	4757		

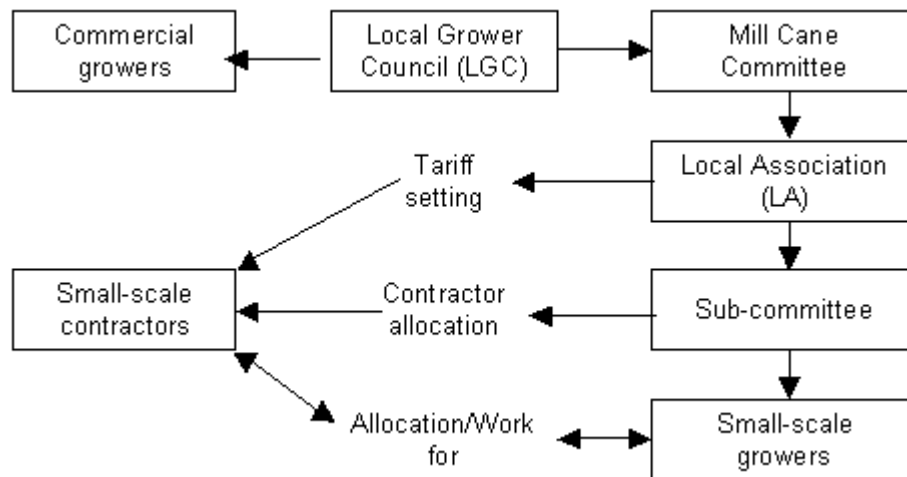
\*Excluding those contractors transporting more than 10 000 tons.

### Institutions influencing small-scale contractor entry

In each study area, contractors enter the industry using similar methods. Although differences in contractor entry do occur across areas, the following sections highlight the common channels. Authorities and influential bodies within the industry (sub-committees, local associations, milling companies) do not formally recognise contractors who source work through channels that do not involve the sub-committees and local associations. However, only 41% of sample contractors had sub-committees or local associations involved in their hiring. Fifty-three per cent indicated grower involvement alone, and 7% indicated both grower and sub-committee/local association involvement. This suggests that 53% of contractors do not regard 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 by 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 of the commercial farming sector. Commercial growers are in direct contact

with the local grower council (LGC), whereas SSGs operate through their respective sub-committees, local associations and mill cane committees, as shown in Figure 1. The sub-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 organisational structures, as some do not acknowledge local associations as having a right of influence over the sub-committees.



(Source: Le Gal and Requis, 1999)

**Figure 1. General organisation of small-scale sugarcane growers and contractors in KZN.**

### *The sub-committee*

#### Election

Sub-committees are locally organised groups of SSGs in each grower area. The election of sub-committee members takes place every one to three years, and is initiated and overseen by various bodies (e.g. South African Sugar Association Experiment Station (SASEX), South African Cane Growers Association (SACGA), the KwaZulu-Natal Department of Agriculture and Environmental Affairs Extension, Mill Cane Committees, milling companies and development officers provided by the local associations), depending on the region. All SSGs in their respective sub-committee areas are invited to nominate candidates and to cast confidential ballots to select sub-committee members (in some areas only 30-50% of SSGs are said to attend the electoral meetings). Five to nine members are elected per sub-committee (often past members are re-elected), including a chairman and vice-chairman, who are normally appointed to the local association. It should be noted that, because most contractors are SSGs themselves, they are not excluded from sub-committee nomination.

#### General function

Sub-committees communicate grievances from SSGs to those of higher influence when resolution is beyond the sub-committee's control or ability. Information (e.g. new industry developments such as harvesting improvements or new cane varieties, or a change in sucrose or RV price) also filters down to SSGs from higher authorities (South African Sugar Association (SASA), the local grower council) via the sub-committees. Sub-committees generally facilitate communication between parties (Mill Cane Committee (MCC), local association, SSG).

### Role in sugarcane allocation to contractors

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 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, SACGA and Tongaat-Hulett Sugar 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 that must be followed by all contractors operating in the area.

### *The local association*

#### Formation

Local associations represent the interests of all SSGs in their local mill areas and consist of members from sub-committees operating within their areas. The development of a local association often depends on the area's tribal structure, so as to minimise conflicts between members from different tribal backgrounds. Furthermore, two members of the local association are elected to sit on the MCC. In areas where less emphasis is placed on the local association, chairmen from most sub-committees may be elected directly onto the MCC (e.g. Sezela). There are approximately six or seven sub-committees per local association, depending on the size of the area over which the local association presides.

#### General function

Local associations oversee the functioning of sub-committees with limited authority (i.e. ensure that cane haulage and allocation operations run correctly), the extent of which depends on the MCC. When problems arise that the sub-committee cannot solve (e.g. allocation conflicts between growers and contractors), local associations will take over the mediator's role in resolving the conflict. In areas where local associations are divided according to tribal structures, all dealings with the tribal authorities are done through the local associations.

### Role in contractor registration and setting charge rate guidelines

Local associations are recognised by the industry as authoritative bodies and it is compulsory for contractors to register with them. Although direct contact with contractors is limited, the associations receive applications from contractors for registration purposes. The associations then register the contractors, after which they become part of the local association (most contractors are already registered as SSGs). Registration aids payment, in that each contractor is given a number that is used to identify him as responsible for hauling a particular 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).

### *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 sub-committees in their own communities, although contractors have also been found to operate in other areas, usually close, or adjacent, to their own areas. At this stage, the sub-committee checks the contractor's machinery, and available tonnage is totalled to see whether work is available. Sub-committees expect potential contractors to purchase machinery only after 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, and 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. A cession is binding for one season only, and a new cession must be signed each year even if the grower uses the same contractor. Signing normally takes place at least once a month (as found in the Sezela area), but varies according to the preference of the sub-committee. The signing of cessions can recur 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 been allocated work by the sub-committee, he is expected to complete the allotted task. However, tasks are not always completed for 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 task, they receive guaranteed payment from the milling company in the form of a deduction from the SSG's pay cheque.

### **Customary institutions influencing small-scale cane farming and contracting in KZN**

Tribal customs, laws and traditions have a great influence on the 'rules of the game' in the small-scale sector of the industry. Firstly, the origin of many small-scale sector problems is believed to be the land tenure situation in tribal areas of KZN (1personal communication). 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 those people in the area without extending enforceable tenure rights. Land purchase or rental markets are therefore imperfect for rural land users. This places a restriction on, for instance, more productive SSGs because they cannot rent or purchase additional land. Thus, SSGs remain small despite the associated constraints, such as diseconomies of size. Also, much land lies idle and uncultivated as the result of an imperfect rental market (Fenwick and 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 the small-scale sector and promote long-term viability.

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<sup>1</sup> Adrian Wynne, Agricultural Economist, South African Cane Growers Association, Mount Edgecombe, South Africa (2003)

A further problem associated with the lack of land rights is the inability of households to use their land as collateral for loans because tribal owned land cannot be repossessed or sold (Fenwick and Lyne, 1998). Such 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 and Lyne, 1999). With the land issue being of great importance, the problem lies beyond the control of those directly involved in the sugar industry, namely the milling companies, SASA and SACGA. Although involvement is necessary by sugar industry players, overall responsibility rests with the government and the tribal authorities. This highlights the need for institutional change that could promote the viability of small-scale contractors, beyond the 'confines' of the sugar industry.

Another impact of customary law is the method of settling disagreements. The sample of contractors suggests that only 36% settle disagreements privately, while 61% indicate that some form of group settlement is necessary (i.e. through sub-committees, associations or mill extension). Individuals are often either afraid, or do not have the status or authority within their community, to state their grievances with effect. Wiseman (2003) found that societies in the rural areas of KZN are traditionally patriarchal in nature. It is therefore expected that women would face greater legal uncertainty and thus higher transaction costs.

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 for these authorities to be included in any institutional change process. Thomson (1996) found the inclusion of credible leaders, such as chiefs and tribal councils, extremely important in bringing institutional change to the tribal areas. Good leaders can 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.

### **Factors inhibiting small-scale contractor performance in KZN**

Institutions in 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. Coming from both the sample survey and case studies, factors are not ranked and are listed in no specific order.

#### *High transaction costs*

Observations show that *ex ante* costs faced by contractors, with respect to sourcing contract work, are high (negotiation costs that include application for membership, approval, contract arrangements and finding approval for many sessions). The risk of losing haulage work is also relatively high for contractors, as work allocated in one year is not necessarily allocated in the next. *Ex post* costs are increased through the risk of contract default in the presence of legal uncertainty for contractors of lower social standing (women). A 'New Institutional Economics' approach endeavours to reduce transaction costs faced by contractors through institutional reform, and would also look for incentive compliant arrangements for performance. This would not only involve decreasing the channels through which contractors need to go in order to obtain work, but may also include provision of physical (roads) and

legal (ensure similar standards for lower status individuals) infrastructure, information and education (Matungul *et al.*, 2001).

#### *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 contractors as high-risk clients, since uncertainty is heightened in the minds of lenders regarding a contractor's ability to service medium-term debt.

#### *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 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).

#### *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 relatively lower social status. A large proportion of SSGs are women, whereas 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. 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 and Lyne, 1998). This sets a double standard in transaction costs faced by different members within a community, thus hampering competition between contractors.

Regarding grower contact, 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).

#### *Limitations on growth of business size*

Ninety-one per cent of sample contractors said they wanted to increase their tonnage. Of these, 72% indicated that this would be possible. Only 52% 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. One-third of the 52% of respondents who wanted to increase their tonnage, also indicated that they needed more machinery to do so. This indicates the low quality of machinery currently in use by contractors. Although many contractors are hauling low tonnages, additional tractors are needed on standby to ensure that 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. Furthermore, the guarantee of work, although limited, would be a contributing factor to the lack of performance incentives and competition. Given that machinery utilisation 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.

#### *Lack of competition and performance incentives*

Work allocation not only inhibits business growth but also prevents competition. Furthermore, charge rate guidelines, normally followed closely by contractors (most of whom lack cost information), also inhibit competition. Wiseman (2003) states that rates are determined allowing for contractor viability, i.e. all operating contractors, including those hauling low tonnages, regardless of actual contractor costs or service quality. SSGs are then faced with higher than market charge rates, and in some cases charge rates are nearly double those charged by commercial contractors (90% higher in some cases). He further states that restructuring needs to take place to ensure that contractors entering the industry do not exceed the number needed, i.e. the number determined by market demand.

#### *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), 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 business. Although only 17% of sample contractors referred directly to low availability of labour, there is concern about the higher and relatively more attractive wages in the commercial sector, and the impact of the HIV/Aids virus, which negatively affects labour productivity. Some contractors travel up to 20 kilometres to source labour.

#### *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; Sahn and Sarris, 1994; both cited in Fenwick and Lyne, 1999). The study sample suggests that 76% 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 SSG sector of the industry.

### **Conclusions and policy recommendations**

Access to contract work is 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). Also, these institutions remove performance incentives by setting prices and allocating work subjectively. SSGs do not have bargaining power and so penalties for contractors providing 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 organisations, increase costs by adding unnecessary channels through which contractors need to proceed.

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 RV payments. Growers need to be able to communicate their grievances to the contractors if performance improvements are to be promoted.

Changes in payment terms (e.g. payments based partly/fully on RV) for contractor services are necessary, in that contractors need to be more motivated to ensure that each delivery reaches the mill before the RV level drops. This would provide an incentive for a reduction in contractor haulage delays. Also, due to contractors having limited access to finance and a high liquidity preference (continuing operations with respect to fuel and repairs), earlier payment (e.g. within two weeks) for their service needs to be seriously considered by milling companies.

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 allowed to set their own prices. In the long run, however, prices would be driven down by competition between contractors, especially after contractors expand and take advantage of economies of size.

Potential steps towards a more competitive contractor sector include:

- Allow contractors to source their own work if they want to do so. A milling company payment scheme is not necessarily needed, although this may guarantee payments to contractors.
- Current extension services 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.
- Any support (information, extension advice) that contractors need should be provided by extension services already in place.
- A short-term solution to contractors determining charge rates may be to provide a list of potential charge rates or price information of all contractors in an area.
- 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.

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). Secondly, government needs to direct more funding towards improving rural infrastructures such as district 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. Thirdly, government needs to ensure that tribal courts do not run a dual system of decision making, but that all contracts are enforced consistently regardless of social status, i.e. there needs to be monitoring of tribal rulings and places of appeal for those with grievances regarding these rulings. Fourthly, labour legislation with regard to the minimum wage bill should be seriously reconsidered, as many small-scale contractors simply cannot pay the legal wage to their

unskilled labour, due to their already relatively high costs of production (high transaction costs, diseconomies of size). Lastly, protection needs to be made available for those competing for work. 'Mafia' type behaviour and abuse of authority in communal areas need to be severely dealt with by law enforcement officers.

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### **REFERENCES**

Beghin JC and Fafchamps M (1995). Constitutions, institutions and the political economy of farm policies: what empirical content? pp 287-295 In: Peters GH and Hedley DD (Eds) *Agricultural Competitiveness: Market Forces and Policy Choice*. Proceedings of the 22nd International Conference of Agricultural Economists, Harare, Zimbabwe. Dartmouth Publishing Company, UK.

Berry S (1993). *No Condition is Permanent: The Social Dynamics of Agrarian Change in Sub-Saharan Africa*. University of Wisconsin Press, Madison, Wisconsin, USA.

Coase RH (1937). The nature of the firm. *Economica* 4(1): 386-405.

Dorward A (1999). A risk programming approach for analysing contractual choice in the presence of transaction costs. *European Review of Agricultural Economics* 26(4): 479-492.

Fenwick LJ and Lyne MC (1998). Factors influencing internal and external credit rationing among small-scale farm households in KwaZulu-Natal. *Agrekon* 37(4): 495-504.

Fenwick LJ and Lyne MC (1999). The relative importance of liquidity and other constraints inhibiting the growth of small-scale farming in KwaZulu-Natal. *Development Southern Africa* 16(1): 141-155.

Hay D (1993). The assessment: competition policy. pp 1-26 In: Hay D and Mayer C (Eds) *Oxford Review of Economic Policy: Competition Policy Volume 9(2)*. Oxford University Press, Oxford, UK.

Le Gal P-Y and Requis E (1999). *The Sugar Cane Harvest Amongst Small South African Growers: General Organisation and the Role of Small Contractors: A Case Study at Amatikulu*. Centre de Cooperation Internationale en Recherche Agronomique pour le Développement (CIRAD), and Institute of Natural Resources, University of Natal, Pietermaritzburg, South Africa.

Matungul PM, Lyne MC and Ortmann GF (2001). Transaction costs and crop marketing in the communal areas of Impendle and Swayimana, KwaZulu-Natal. *Development Southern Africa* 18(3): 347-363.

North DC (1990). *Institutions, Institutional Change and Economic Performance*. Cambridge University Press, Cambridge, UK.

Nothard BW, Ortmann GF and Meyer E (2004). Small-scale sugarcane contractor attributes affecting their service quality in KwaZulu-Natal. Proc S Afr Sug Technol Ass 78 (in press).

Sandmo A (2000). Towards a competitive society? The promotion of competition as a goal of economic policy. pp 6-19 In: Hope E (Ed) *Competition Policy Analysis*. Routledge, London, UK.

Sokhela MP (1999). Enhancing the contribution of small-scale growers in the sugar industry. PhD Thesis, Faculty of Science, University of Natal, Pietermaritzburg, South Africa.

Thomson DN (1996). A study of land rental markets and institutions in communal areas of rural KwaZulu-Natal. PhD Dissertation, Department of Agricultural Economics, University of Natal, Pietermaritzburg, South Africa.

Williamson OE (1985). *The Economic Institutions of Capitalism*. New York Free Press, New York, USA.

Wiseman G (2003). Value chain improvement programme: thoughts on the small-scale grower component. Document prepared for South African Cane Growers Association, Mount Edgecombe, South Africa.

Zylbersztajn D (2003). Costs, transactions, and transaction costs: are there simple answers for complex questions? <http://www.ead.fea.usp.br/wpapers/2003/03-006.pdf>. Accessed 26 February 2003.