ENHANCING SUPPORT MEASURES TO SMALL SCALE GROWERS AND NEW FREEHOLD GROWERS IN THE SOUTH AFRICAN SUGAR INDUSTRY

ARMITAGE RM, HURLY KM and GILLITT CG

South African Cane Growers' Association, PO Box 888, Mount Edgecombe, 4300, South Africa RArmitage@canegrowers.co.za KHurly@canegrowers.co.za

Abstract

The South African sugar industry is a significant contributor to the local economy and is committed to supporting Land Reform and Broad Based Black Economic Empowerment. The industry has made steady progress with transformation of commercially owned land since 1994, and, at the end of the 2006/07 season, black owners controlled 15% of the freehold area. Including the cane grown in communal authority areas, 30% of the total industry area was owned/operated by black growers at this time. With the large number of new entrants into the industry came the challenge of empowering the new growers to operate sustainable cane farm businesses. Yield trends of the new freehold growers and small scale growers highlight the need to enhance support measures available to these growers. Further complicating the matter is the emergence of community ownership arrangements arising from the various settlement models used for land restitution. The paper analyses current support services and highlights requirements for improved service delivery to entrant growers and small scale growers. The identified areas for small scale grower support include: input procurement and distribution to communal areas, development of viable commercial contracting enterprises in these areas, and access to credit from agricultural development institutions. Support for new freehold growers needs to focus on improving business understanding with the aim of improving long term planning, productivity, competitiveness, benchmarking and leadership.

Introduction

The South African sugar industry is significant in the scale of its contributions to GDP, employment and foreign exchange earnings in South Africa. More specifically the sugar industry contributes between 0.5-0.7% of national GDP, 0.5% of total income tax, 3.6% of total fixed capital stock of business enterprises, and 0.3% of salaries and wages. The sugar industry directly accounts for 10.9% of all agricultural employment and 1.3% of national employment. After considering the sugar industry's many linkages, direct and indirect employment amounts to 2.5% of national employment (McCarthy, 2007).

The sugar industry is committed to supporting Government's target to transfer 30% of commercially owned farm land to previously disadvantaged South Africans by 2014, and to Broad Based Black Economic Empowerment. The sugar industry established an independent land reform entity, called Inkezo Land Company, with the objective of streamlining transformation in cane land ownership (SASA, 2008). While the attainment of the 30% target is critical, the ultimate success of the sugar industry land reform program will be judged on its ability to create sustainable black growers (Thomson and Bates, 2005).

The sugar industry also has a long history in promoting and supporting cane production by small scale growers in communal areas (Bates, 1996). This paper focuses on the experiences of the sugar industry in providing support to small scale growers in communal areas, post transfer support to land redistribution beneficiaries (new freehold growers), and questions enhanced levels of support to these growers and to future land restitution beneficiaries.

Transformation in the cane growing sector

The sugar industry has made steady progress with transformation of commercially owned cane land since 1994. Table 1 shows that on 1 April 2007 there were 358 previously disadvantaged growers (new freehold growers) owning 42 397 hectares of cane land, and one previously disadvantaged miller owning a further 7951 hectares of cane land. This brings to 15% the total extent of black owned freehold cane land. This reform has been achieved through willing buyer/willing seller Land Redistribution and Development (LRAD) supported transactions or through non-LRAD open market transactions. The extent of black freehold land ownership is expected to increase rapidly in future with the resolution of many outstanding land claims across the cane growing regions, and as a result of ongoing land redistribution initiatives. For example, information obtained by the South African Cane Growers' Association (CANEGROWERS) from the Office of the Regional Land Claims Commission in November 2007 showed that 51% of the freehold cane area in KwaZulu-Natal and 78% of the freehold cane area in Mpumalanga was under gazetted claim or in the advanced stages of pre-gazetting during the 2007/08 season. In addition, there were approximately 1463 unresolved land claims in KwaZulu-Natal and 1326 in Mpumalanga. The extent of land claims in the industry constrains the opportunity for further land redistribution initiatives, and the resolution of restitution claims is imperative for the effective functioning of a land market.

In addition to the more recent transformation of commercially owned cane land, the sugar industry has developed and supported smallholder cane production in communal areas since the 1930s, and has provided credit to small scale growers since 1973 (Huntly, 1966; Bates, 1996). Table 1 shows that in April 2007 there were 43 579 small scale growers cultivating 74 226 hectares, or 18% of the total industry area under cane. Black controlled cane land in the sugar industry therefore amounted to 30% of the total industry area under cane.

Table 1. Number and registered cane area of South Africa's cane growers on 1 April 2006.

| | 2006/07 season | | | |
|-----------------------------|-------------------|----------------|---------------|--------------------|
| | Number of growers | Cane area (ha) | Cane area (%) | Freehold cane area |
| Black owned/controlled land | 43 938 | 124 574 | 30 | 15 |
| Small scale growers (SSGs) | 43 579 | 74 226 | 18 | 0 |
| New freehold growers (NFGs) | 358 | 42 397 | 10 | 13 |
| Miller-cum-planters (MCPs) | 1 | 7 951 | 2 | 2 |
| White owned/controlled land | 1 376 | 294 890 | 70 | 85 |
| Large scale growers (LSGs) | 1 358 | 268 001 | 64 | 77 |
| Miller-cum-planters (MCPs) | 18 | 26 889 | 6 | 8 |
| Total | 45 314 | 419 465 | 100 | 100 |

Source: SASA (2007)

While total cane deliveries from new freehold growers have increased rapidly in recent years, as shown in Figure 1, average new freehold grower yields per hectare remain lower than average yields from established large scale growers. This is indicative of the challenges faced by new freehold growers in sustaining farm businesses that deliver real economic empowerment to previously disadvantaged South Africans. These challenges include:

- Lack of business skills and business experience, especially record keeping, accounting, financial management, fiduciary responsibilities and tax compliance.
- Lack of technical skills and experience; including agronomic, mechanical and human relations skills and an inability to access key information.
- Limited resource base, leading to high levels of gearing and a reliance on contractors to perform primary production activities.
- Limited aspirations and no best practice mindset (e.g. the land acquisition is the achievement).

These challenges heighten the business and financial risks faced by new freehold growers. Improved levels and coordination of post transfer support to new freehold growers are imperative for their sustainability. New freehold grower farm businesses generally fall within the first of the four developmental phases characterising business growth (adapted by Jackson, 2007 from Venter *et al.*, 2005). These four phases are described as the Survivalist Phase, the Informal Group Phase, the Formal Phase and the Reorganised Phase. Businesses in the Survivalist Phase have little or no structure, little planning and a strong survival focus. Industry support services are required that can accelerate the formalisation of new freehold grower farm businesses into the fourth, Reorganised Phase, characterised by a proactive structure, long term planning, strong productivity and competitiveness focus and professional leadership.

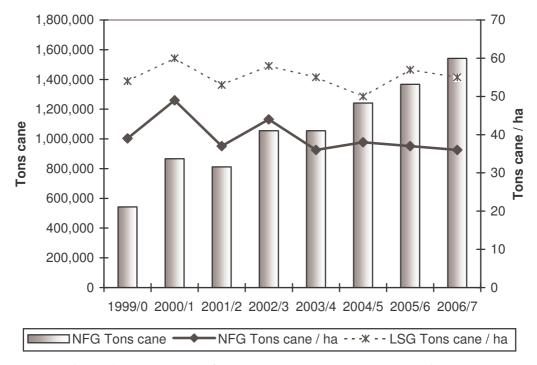


Figure 1. Industry new freehold grower total cane production and average yield per hectare from 1999/2000 – 2006/07.

In contrast to new freehold growers, total small scale grower production and average yields per hectare have shown rapid decline in recent seasons, as shown in Figure 2. Since the 1999/0 season, small scale grower production has declined from 3,104,559 tons cane in 1999/0 to 2,030,443 tons cane in 2006/7, while average yields have been below 30 tons cane per hectare since the 2003/4 season. This represents a loss in earnings to this sector of over R250 million annually.

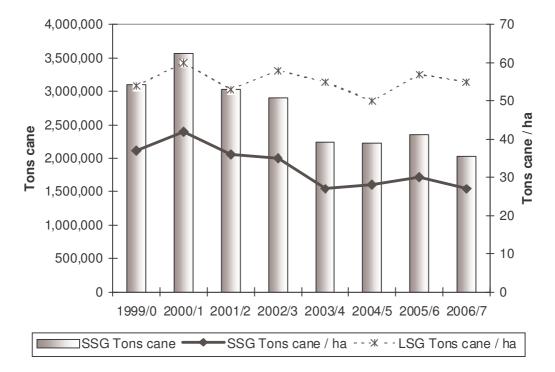


Figure 2. Industry small scale grower total cane production and average yield per hectare from 1999/2000 – 2006/07.

A distinction can be drawn between the irrigated small scale grower production area of Mpumalanga where total production has remained fairly constant over the period in question, although average yields have declined, as shown in Figure 3.

The strong and consistent decline of 7% per annum in total small scale grower production since its peak in the mid-1990's is evidence of the challenging cane production environment faced by small scale growers. The decline in productivity has been attributed to the withdrawal of inputs and services by certain milling companies after the restructuring of the two-tiered quota payment system, and by declining profitability of cane production (Bates and Sokhela, 2003).

A key focus of the sugar industry must therefore be to improve the level and coordination of support services to small scale growers and new freehold growers in a manner that promotes sustainable land reform and maintains the economic contribution of the sugar industry toward GDP, foreign exchange earnings and employment in South Africa.

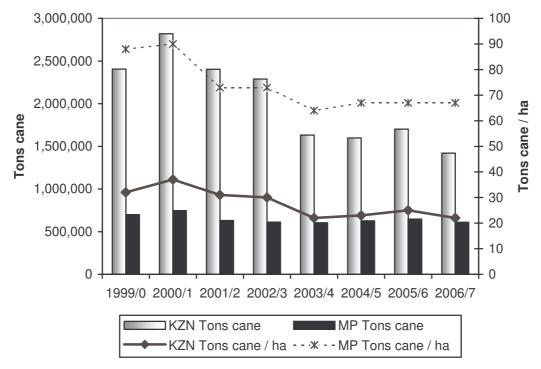


Figure 3. KwaZulu-Natal (KZN) and Mpumalanga (MP) small scale grower total cane production and average yield per hectare from 1999/2000 – 2006/07.

Description of existing grower support services to small scale growers and new freehold growers

The South African Sugar Association (SASA) and CANEGROWERS, together with the various Milling Companies and Government departments provide support services to small scale growers and new freehold growers. These services are both institutional and organisational, and cover issues of representation, training, research and development, and provision of inputs and services for cane production (Thomson and Bates, 2005). The cane growing sector has a structured, democratic organisational system that allows the voices of small scale growers and new freehold growers to be heard in industry decision making. At Local Grower Council level in each mill area and at CANEGROWERS Board level, representation is drawn in equal numbers from small scale growers and large scale growers.

The primary grower support services provided by SASA include the following:

- The South African Sugarcane Research Institute (SASRI) undertakes research and development, particularly on the aspects of variety improvement, pest and disease control, and resource optimisation. Research is coupled with technology transfer through regional Extension Officers. In the case of small scale growers, a Joint Venture extension service exists between SASRI and the Department of Agriculture in KwaZulu-Natal and Mpumalanga.
- The Shukela Training Centre provides agricultural training, in addition to industrial training in most trades for the sugar industry.
- Umthombo Agricultural Finance (UAF) provides financial services to small scale growers, including a retention savings scheme for ration crop inputs.

- Local Pest, Disease and Variety Control Committees monitor and advise in respect of pests, diseases and cane varieties.
- Inkezo Land Company facilitates land transfers in terms of Government's land reform policy by putting information systems in place, matching potential buyers and sellers, undertaking pre-purchase feasibility studies, raising finance and securing government grants, identifying support service providers and matching these with new farmers, monitoring the effectiveness of mentorship, and providing a point of interaction for communicating with industry role players and issues relating to land reform.
- Mill Group Boards facilitate the reception and testing of cane at the mills, and secure market access for small scale growers and new freehold growers. Long term supply contracts are negotiated between individual growers and their respective miller, or an annual supply contract is entered into after a grower's first estimate has been accepted by the Miller, and is overseen by the Mill Group Board.
- The Grower Development Account channels funding into local initiatives, such as seedcane schemes or transport initiatives that improve cane production ability of small scale growers and new freehold growers.
- The Small Grower Development Trust (SGDT) provides training funds and administrative support to small scale growers. Since 1992 more than 20 000 small scale growers have been trained with funding from the SGDT.

The primary grower support services provided by CANEGROWERS include the following:

- Farm business advisory services, including budgets, cash-flow forecasts, mechanisation options, feasibility studies, business plans, and other economic advice and information are provided by Agricultural Economists in the 10 regional CANEGROWERS' offices located throughout the industry.
- Institutional and technical support for small scale growers by Grower Support Officers who facilitate the functioning of small scale grower representative organisations, coordinate cane supply logistics in communal areas and conduct technical cane husbandry training.
- Bookkeeping and accounting services are provided by the CaneFarms Bookkeeping Service. CaneFarms is a dedicated accounting and VAT service for cane growers providing monthly management reports, and preparation of annual financial statements and public officer duties through a 'one stop' accounting service option for new freehold growers. CaneFarms also plays an important development role by training new freehold growers in financial management aspects.
- Grower training programs are coordinated by a Grower Development Manager. A comprehensive new freehold grower training program has been developed, covering industry structures, business management, technical skills and human resource management.
- CANEGROWERS coordinates mentorship programs that focus on deficient skills among new freehold growers, including technical, financial management, business management and communication skills. These programs have been funded by the AgriSETA and National Department of Agriculture.
- Induction programs for new growers are coordinated by CANEGROWERS, that cover2 industry structure, regulations, and the nature and sources of available support services.
- Economic research is undertaken on behalf of growers, and benchmarking statistics are provided to growers about their farm businesses.

In addition to these services, milling companies provide some or all of the following services depending on their company policy.

- Technical advice, training and services, including cane harvesting and loading services.
- Organisation support, including the coordination of cane deliveries.
- Grower registration, land measurement and mapping.
- Financial support, being direct or indirect via facilitation with financial service providers.
- Infrastructure support for loading zone, road and bridge maintenance.
- Provision of seedcane.
- Contractor training and support.
- Irrigation infrastructure maintenance.

Along with the support services offered by input suppliers, financial services providers and Government extension services, there can be a complex set of relationships and interactions between these services providers. Knowing how and from whom to access these services is a challenge faced by small scale and new freehold growers (Thomson and Bates, 2005).

Financial performance of dryland coastal growers during the 2006/07 season

The results of CANEGROWERS' 2006/07 small scale grower production cost survey and the 2006/07 large scale grower production cost survey were used to analyse the difference in cost structures of small scale growers, new freehold growers and large scale growers. The results are useful in redirecting industry support services to address sustainability issues.

The large scale grower production cost survey results covered 33% and 34% of the number of large scale growers and area under cane, respectively. Information was obtained through a postal survey of all large scale growers, from clients of CANEGROWERS' CaneFarms Bookkeeping and Accounting Service or directly from the individual grower's accountant. The small scale grower production cost survey was undertaken by personal interview of small scale growers with available production records. Information was drawn from cane payment statements, including cession deductions for service providers and input suppliers, and from account statements from agricultural cooperatives. As a result a survey bias toward more organised, larger and arguably more successful small scale growers is expected.

The large scale grower cost survey respondents were categorised as either (black) new freehold growers or (white) large scale growers, and the sample was restricted to the coastal dryland mills (Umzimkulu, Sezela, Maidstone, Gledhow, Darnall, Amatikulu and Felixton) due to the predominance of new freehold grower responses from these mills. For comparative purposes, the small scale grower responses were similarly restricted to the coastal dryland mills. Table 2 shows the average production costs before management and tax for these three grower groupings from the coastal dryland mills.

The difference in farm size and economies of scale are evident in Table 2. Small scale growers on average operate at very small scales of production, delivering 159 tons cane from 3.9 hectares under cane. This is higher than the overall small scale grower industry averages of 55 tons and 2.0 hectares, respectively, and is possibly explained by a sample bias from surveying only small scale growers with available production records.

New freehold growers also operated at relatively smaller scales of production (115 hectares) than their established white large scale grower counterparts (221 hectares). This is a reflection of both the equity gap acting as a barrier to investment in large scale production by aspirant black cane farm owners, and the land disposal programs of millers in which milling estates were typically divided into 100 hectare units for disposal to new freehold growers.

Cane yields and RV% cane, an indication of cane quality, were found to be lowest for small scale growers, while new freehold grower yields and quality were considerably lower than their large scale grower peers. Consequently cane revenue per hectare for large scale growers was on average 30% higher than small scale grower revenue and 17% higher than new freehold grower revenue.

Differences in the production cost structures of small scale growers, new freehold growers and large scale growers are also evident from Table 2. Fertiliser represents the single largest input material procurement in cane production. Small scale growers on average spent more per hectare on fertiliser than large scale growers, despite achieving significantly lower yields. This is explained by the high transaction costs incurred by small scale growers in purchasing inputs and transporting them to field side. Small scale growers are generally cash buyers of fertiliser and chemicals due to their low levels of creditworthiness and they do not benefit from member discounts or terms offered by agricultural cooperatives. Transaction costs in availing inputs in the right quantity and at the right time also lead to timing inefficiencies in production activities and lower application rates.

The survey results show that new freehold growers spent considerably less per hectare on fertiliser and yield-risk reducing chemicals than large scale growers¹. Lower levels of investment in variable inputs by new freehold growers manifest in the yield penalty shown in the survey results. Expenditure on chemicals (herbicides) was lowest by small scale growers, while new freehold growers spent significantly less on chemicals than their large scale grower peers. This indicates lower levels of such technology adoption by small scale growers and new freehold growers, and possibly a greater reliance on farm staff to perform manual weed control operations.

An analysis of farm staff, contractors, cane transport, fuel & lubricants and mechanical maintenance expenditure items show that small scale growers and new freehold growers incur lower farm staff costs but make greater use of contractors for farm operations. Small scale grower expenditure on farm staff is primarily for cane cutters and to a lesser degree for manual weed control operations. Small scale growers rely almost exclusively on contractors to perform production and harvesting operations, and are generally exposed to relatively high contractor rates. There is also an ageing population among small scale growers leading to greater reliance on contractors.

New freehold growers also rely more heavily on contractors to perform farm operations than do established large scale growers. This may be the result of capital constraints (these farm businesses are typically highly gearing following the farm land acquisition) that precludes the purchase of capital items necessary to operate a cane farm. The advantages of outsourcing farm operations to professional contractors include the assurance of a successful crop harvest

¹ Fertiliser and chemical expenditure of new freehold growers was recorded using Generally Accepted Accounting Procedures (GAAP) with respect to the direct support LRAD beneficiaries received in the form of fertiliser and chemicals through the Department of Agriculture's Siyavuna Program.

and avoidance of high machinery ownership costs stemming from low levels of utilisation at smaller economies of scale, but comes at a trade-off as management capacity is under-utilised, especially at small scales of production. However, growers with a high opportunity cost of time spent in off-farm employment may actively seek to reduce their management time input in their farming operations.

Table 2. Season cost survey for 2006/07 for small scale, new freehold and large scale growers at coastal dryland mills.

| | Class of grower | | |
|------------------------------------|-----------------|--------------|-------------|
| | Small scale | New freehold | Large scale |
| Sample size | 240 | 53 | 84 |
| Average tons cane | 159.9 | 5295.0 | 12 001.6 |
| Average area under cane | 3.9 | 115.0 | 220.5 |
| Average yield | 41.0 | 46.0 | 54.4 |
| Average RV% | 10.71% | 11.15% | 11.48% |
| Income (R/ha) | | | |
| Cane sales | 7520 | 8913 | 10 765 |
| Expenditure (R/ha) | | | |
| Fertiliser | 1351 | 870 | 1316 |
| Chemicals | 315 | 373 | 460 |
| Farm staff | 1714 | 1734 | 2476 |
| Contractors | 3347 | 1531 | 564 |
| Cane transport | 0 | 893 | 1211 |
| Fuels and lubricants | 0 | 407 | 627 |
| Mechanical maintenance | 128 | 358 | 684 |
| Fixtures maintenance | 0 | 104 | 216 |
| Services | 53 | 94 | 172 |
| Administration | 66 | 241 | 411 |
| Cane levies | 113 | 109 | 152 |
| Other levies | 38 | 3 | 13 |
| Insurance | 3 | 175 | 211 |
| Licences | 6 | 5 | 11 |
| Irrigation costs | 14 | 0 | 6 |
| Depreciation | 0 | 614 | 316 |
| Sundry | 1 | 114 | 174 |
| Total operating expenditure | 7148 | 7625 | 9018 |
| Net operating income | 371 | 1288 | 1747 |
| Interest | 4 | 1027 | 475 |
| Rent/lease | 0 | 84 | 321 |
| Total cost | 7152 | 8736 | 9814 |
| Earnings before management and tax | 367 | 177 | 951 |
| Interest cover (EBIT/Interest) | 93.1 | 1.2 | 3.0 |

Source: CANEGROWERS (2007)

Table 2 shows that one area in which small scale growers and new freehold growers have an advantage over large scale grower cost structures is in the overhead expenditure associated with administration, fixtures maintenance, services and sundry. Small scale grower member organisation levies (Other levies) are found to be significantly higher than large scale growers. This may be explained by the costs associated with running organisations that represent many small disparate growers and the organisation of community loading zones.

Depreciation was found to be significantly higher among new freehold growers despite their obvious reliance on contractors to perform primary production activities. This may be a reflection of more recent machinery acquisition by new freehold growers wishing to undertake more of their own production activities (and accelerated depreciation allowances), and because of their smaller economies of scale.

After deducting all Operating Expenditure from Gross Income, Net Operating Income (NOI) was found to be lowest for small scale growers (R371/ha), while the level of NOI was found to be slightly lower for new freehold growers (R1288/ha) than for large scale growers (R1747/ha). The difference between new freehold growers and large scale growers is partially explained by the greater reliance on contractors to manage farm operations by new freehold growers. After accounting for Foreign Factor Costs, the Earnings Before Management and Tax of new freehold growers (R177/ha) was significantly lower than large scale growers (R951/ha). New freehold grower interest costs of R1027/ha were more than double that of large scale growers, an indication of their relatively higher level of gearing.

The small scale grower survey results reveal very low interest costs for small scale growers, with only 11 observations out of the 240 growers surveyed. This may be the result of debt write-offs by UAF during the 2005/06 season, or due to the sample respondents either relying solely on equity for reinvestment in cane production, or not to re-establishing cane fields due to the negligible returns from cane production over the past number of seasons. This may partially explain the decline in the small scale grower sector of 7% per annum since 1999/2000.

Smallholder cane producers are unique in the additional financial support payments they receive. Small scale cane producers benefit from Flat VAT Rate and Diesel Rebate payments that are sanctioned by the Receiver of Revenue. During the 2006/07 season, the Flat VAT Rate and Diesel Rebate were calculated to be R15.38 and R2.74 per ton cane, respectively.

In recognition of the many challenges faced by small scale growers, they also receive a Supplementary Payment Fund (SPF) payment, of which 64% is effectively contributed by large scale growers delivering more than 5000 tons cane and 36% by the milling companies. During the 2006/07 season the SPF payment for small scale growers delivering less than 200 tons cane was R13.30 per ton cane. The NOI of small scale growers after accounting for these financial support measures, shown in Table 3, highlights the importance of these additional financial support payments.

Table 3. Returns to small scale grower production after the Flat VAT Rate, Diesel Rebate and Supplementary Payment Fund during the 2006/07 season.

| | R/ha |
|------------------------------------|------|
| Net operating income | 367 |
| Add: | |
| Flat VAT Rate | 630 |
| Diesel Rebate | 112 |
| Supplementary Fund Rebate | 545 |
| Net operating income after support | 1654 |

Despite the support measures to small scale growers there are some issues over which small scale growers have little control that will continue to undermine production. Firstly, land in

communal areas has zero opportunity cost because small scale growers do not have title to their land (thus precluding land sales markets) and land rental markets typically fail due to high transaction costs. This leads to market failure and inefficient allocation of land (Nieuwoudt, 1990). Secondly, Secondly, the real opportunity cost of time spent in farming has increased, encouraging these farmers to invest relatively less time in farming. Thirdly, growers have no control over the cane price, and in the current environment of low primary producer prices and rapidly rising input costs, the perception of negligible returns to cane production will act as a disincentive to investment in small scale grower cane production. Finally, small scale growers have little bargaining power in negotiations with contractors and little recourse to poor contractor performance.

Rethinking support measures for small scale growers and new freehold growers

In the poor economic environment confronting cane growers and the low opportunity cost of farmland in communal areas, it is important to strengthen support services to small scale growers and new freehold growers to promote their ongoing sustainability.

Small scale growers

The 2006/07 small scale grower cost survey results for coastal dryland growers show that support services that address input logistics, contractor efficiency and access to credit will provide the biggest wins for small scale growers. Through improved coordination in support services between SASA, CANEGROWERS and the milling companies it is also possible to reduce duplication, improve interdependence between support services and extend the range of services offered to small scale growers.

Firstly, improved input logistics would make fertiliser and chemicals more readily available in deep rural areas, at lower cost and would reduce costly timing delays in production activities. Small scale growers would benefit from lower input prices and from the yield response due to enhanced input application levels. Small scale grower industry yields would need to increase by 6% to generate a similar level of revenue to the SPF, which amounts to approximately R25 million per annum. The SPF was introduced in 2005/06 and, based upon its success in arresting the decline in the small scale grower sector, the SPF funding could be redirected into establishing a dedicated input distribution fleet for small scale growers, or supporting the enterprise development of such service providers. Existing support services, such as mill and Government extension services could be deployed to support this process, particularly through the adoption of best practice application techniques. The cost of over or under input application is highest for small scale growers at low scales of operation, and coordinated soil sampling of small scale grower fields would optimise fertiliser application levels and yields. The possibility also exists to link the Retention Savings scheme for small scale growers to a tender process for fertiliser, where money withheld in retention would be used to guarantee payment to fertiliser input suppliers, and the product distributed to the small scale growers in the coordinated manner contemplated above. Through technology advances and scheduling, it is also possible to distribute fertiliser from a central point, such as a mill warehouse, through the (empty) cane transport return trip. Infrastructure, specifically roads and bridges, continue to be badly maintained and poorly developed in the communal areas, increasing the costs of cane haulage for small scale growers. More attention should be paid to infrastructure through the Integrated Development Plans of the municipalities, and Government should retain the responsibility of rural road maintenance. Improving this infrastructure would also create opportunities for other businesses in these areas. In irrigated areas it is also crucial for mill extension personnel to assist small scale growers with irrigation pump and infrastructure maintenance. It is important to improve irrigation efficiency among small scale growers through scheduling in light of looming electricity price hikes by Eskom and water user charges by the Department of Water Affairs and Forestry.

Secondly, due to the high prevalence of outsourcing primary production practices to contractors in the small scale grower sector, the improvement of contractor competitiveness and efficiency is vital to the sustainability of this sector. Research by Nothard et al. (2004) found that there are various institutional and resource constraints limiting contractor performance. Sub-committees in each region allocate work and set rates, so there is a lack of competition and performance incentives amongst contractors. There is also little interaction between grower and contractor, which results in untimely harvesting operations and impacts negatively on RV yields due to cane quality deterioration. Nothard et al. (2004) recommend linking the RV level in cane to the contractor payment terms, and earlier payment to contractors to alleviate liquidity constraints. However, this is difficult as the initial level of RV is unknown and is only determined once the cane has entered the mill, and because grower cane payments are received a month in arrears. Nothard et al. (2004) suggest that a competitive contractor sector is promoted to improve performance. This is important to fill the vacuum left by the withdrawal of contracting services by the milling companies. Up to 2002, some milling companies provided contracting services, including cane establishment services, to small scale growers. Under the previous quota system regulated by SASA, small scale growers and millers earned a preferential A-Pool price on all small scale grower deliveries. With the restructuring of the cane payment system this incentive for miller support services to small scale growers was removed (Bates and Sokhela, 2003).

Various contractor support programs have been run in the past; however, renewed focus on contractor development is warranted. In particular, enterprise development of successful small scale growers into commercial contracting ventures should be encouraged to capitalise on black economic empowerment opportunities. Industry support services and small scale grower member organisations have a role to play in aligning small scale growers with such new service providers, based upon commercial principles that promote utilisation of equipment and efficiency enhancements in cane harvesting. Tribal authority approval may also be necessary. Thorough business planning should be undertaken for these new contracting ventures by industry support staff and used as a means to access finance. Agricultural development agencies and financial institutions are required to recognise contractors as a critical component of the sugar value chain capable of advancing small scale grower production, and capable of financial intermediation. However, the inherent business risks and high capital constraints will necessitate enhanced levels of grant funding for machinery acquisition, possibly through the Department of Agriculture's Siyavuna Program. This is consistent with the finding of Ngqangweni and Hendriks (2003) that in underproductive but high potential communal areas, an income shock is most likely to be driven by increased agricultural production, but this is unlikely without significant public sector investment. This paper contends that such public sector investment to increase small scale grower production is inextricably tied to the contractor sector.

Thirdly, the importance of access to finance in agricultural development is well documented, yet only a small number of small scale farmers have access to agricultural finance (Coetzee, 2003). Delivery of public sector investment in small scale agriculture, such as the Micro Agricultural Finance Scheme of South Africa (MAFISA), is overdue. New models of extending credit to small scale cane growers by using the standing crop as security, are urgently required. This will also apply to land claim beneficiaries because restituted land

lacks collateral value, effectively ruling out access to working capital from financial institutions. It is important for Government to look to established and reliable instruments for delivering funds to rural small scale growers, such as Umthombo Agricultural Finance. The development of Akwandze Agricultural Finance in the Mpumalanga cane supply region is a model that should be closely monitored by other areas. The Akwandze model requires financial commitment from both the growers and local miller, but secures access to capital for small scale growers at preferential interest rates, and critically ensures that there is interdependence between the spectrum of small scale grower support services, from access to credit and inputs, to extension, irrigation maintenance, contractors and pest and disease control.

Finally, the emergence of small scale development projects in communal areas signals a new focus on cooperative farming as a means to improve returns to cane production through improved economies of scale and bargaining power, and reduced transaction costs in input procurement, cane harvesting and financing. Under such arrangements small scale growers lease their land (under a permission to occupy from the local authority) to a cooperative in return for a rental and dividend payment, and the cooperative undertakes activities along commercial production principles.

New Institutional Economists such as Cook (1995) and Cook and Iliopoulos (2000) have identified the institutional flaws of traditional cooperatives to be poorly defined property rights, and poorly aligned residual rights of control and return. These institutional flaws manifest in the form of five problems: the free-rider, horizon, portfolio, control and influence cost problems. Thus, there is good reason to recommend that new development projects should be structured as Private Companies or suitably structured Trusts rather than as cooperatives.

The growing number of small scale grower development projects will require greater levels of support with respect to business and financial management, and training and mentorship. Institutional training for community based cane production entities will also be important to the sustainability of such entities, especially regarding conflict resolution and distribution of profits. At present there is a dearth of internal industry capacity capable of providing institutional training and support. Government institutions have an important role to play in this regard. Obviously, policy changes that allow small scale growers to scale up production, such as tenure reform in communal areas, cannot be overlooked but is largely beyond the control of industry support services. However, there is a role for industry support services to influence traditional authorities to strengthen traditional institutions and reduce transaction costs in farmland rental markets.

New freehold growers

The 2006/07 large scale grower cost survey results for coastal dryland growers show that new freehold grower expenditure on fertiliser is considerably lower than large scale growers. Renewed agronomic extension support is required to educate new freehold growers about best practice fertiliser application levels and techniques. While financial administration by new freehold growers receives relatively high priority by industry service providers, there is a need to develop field level record keeping systems by new freehold growers. Field level record systems facilitate improved management decision-making, as production activities can be based upon fact, and benchmarking can be undertaken. A number of computer based farm record keeping software solutions are available commercially; however, the challenge for new freehold growers lies in acquiring the computer hardware and computer literacy. Computer

literacy training for new freehold growers should become a focal point in future training needs assessments, and programs that encourage the uptake of computers among new freehold growers encouraged. These tools will equip new freehold growers to become more competitive and facilitate communications, at relatively marginal cost. Adoption of manual record keeping systems and production planning systems, which are uncomplicated and cheap to establish, should be encouraged by extension services for the resource poor.

High debt burdens among new freehold growers, indicated by the high surveyed interest costs, will make their farm businesses sensitive to failure in the present environment where input price increases far outstrip cane price increases. It is important for industry service providers to identify exit opportunities for new freehold growers in financial distress, and equally important to identify opportunities for successful new freehold growers to expand their cane area and generate greater economies of scale. Future land redistribution transactions will require close attention to financial gearing levels with greater subsidy to transfer the land. The recent proposal by the Department of Land Affairs to increase the LRAD grant structure is a notable development in this regard. Financial services that 'reach out' to new growers and address their unique needs are required from both public and private sectors (Makhura, 2008). Given the low rates of return in cane production at present, and the accepted rates of return around 5% for agriculture in general, new freehold growers should not be expected to repay more than this in the first year to avoid cash-flow stress, with the further possibility of servicing only interest in the early years of the loan term (Nieuwoudt, 2004). There is a critical role for Development Banks to play in providing credit to growers, and for these institutions to dedicate themselves to development ideals and support of transformation of land ownership in South Africa.

Land restitution beneficiaries

With the vast majority of the cane industry under gazetted or pre-gazetted community based land claims, it is conceivable that significant portions of the cane industry will in the near future fall under community ownership of Trusts or Community Property Associations established for the benefit of restitution beneficiaries. Settlement models include lease-back, joint venture, management company or full claimant control over the farm enterprise. This poses serious questions for existing support services in the sugar industry, and beyond.

Firstly, large community based organisations will require institutional support that develops an understanding of the 'rules of the game' regarding the functioning of the entity, dispute resolution mechanisms and the particular business settlement model. This support should commence prior to the settlement of the claim, and is incumbent upon the Department of Land Affairs. An understanding of the sugar industry structure and obligations of registered cane growers is also required from industry support services.

Secondly, independent bookkeeping, financial management and auditing of the financial affairs of the organisation is necessary to protect the interests of individual members, the majority of whom will be divorced from the management of the organisation, and to provide training and development in financial management and tax compliance.

Finally, the effectiveness and uptake of agronomic and economic extension services will need to be monitored, and adapted to suit the unique needs of the claimant community, joint venture, management company or lessee. Co-ordination of services and interventions in a locally based focussed land reform unit will be key in this regard.

An important cross-cutting initiative should be the establishment of local area land reform committees to assume responsibility of promoting sustainable land reform, with representation from all stakeholders including millers, SASRI, CANEGROWERS, Inkezo, Regional Land Claims Commission, Department of Land Affairs, Department of Agriculture and Environmental Affairs, and municipalities. Through these committees greater interdependence among land reform beneficiary support service providers can be achieved by sharing information, monitoring progress, and identifying and addressing bottlenecks speedily in the land reform process.

Conclusion

In the small scale cane growing sector, which over the past decade has faced increasing costs and declining productivity and returns, support services that improve the availability of inputs and services in communal areas are required. Important interventions include input procurement and distribution to communal areas, and the development of viable commercial contracting enterprises in communal areas to provide land preparation and harvesting services. Access to credit from agricultural development institutions remains a critical requirement for small scale grower reinvestment in cane production.

Support services to current and future new freehold growers need to focus on formalising these farm businesses into a reorganised structured state, with a strong focus on long term planning, productivity, competitiveness, benchmarking and professional leadership. Access to credit, and debt repayment capacity need to be seriously considered by agricultural finance institutions, such as Land Bank, Ithala and Mpumalanga Agricultural Development Corporation, who should through their black economic empowerment policies focus on their development role in land reform. Many new growers have entered the sugar industry with limited business and technical skills and are unsure how to prioritise advice they receive from the myriad of service providers. The current growers have a key role to play in mentorship, and Government in turn needs to understand that farming has changed and to revisit farmer support programs.

Finally, the strong likelihood of large areas of the sugar industry being settled to communities will make the task that much harder, with institutional issues requiring resolution for the business of farming to continue.

REFERENCES

- Bates RF (1996). An Evaluation of the South African Sugar Industry's Small Cane Growers' Financial Aid Fund. PhD Thesis, University of Natal.
- Bates RF and Sokhela P (2003). The development of the small scale sugar cane growers: A success story? In: WL Nieuwoudt and J Groenewald (Eds), *The Challenge of Change: Agriculture, Land and the South African Economy*. University of Natal Press, Scottsville, South Africa.
- CANEGROWERS (2007). 2006/7 Large Scale Grower Cost Survey and 2006/7 Small Scale Grower Cost Survey. Published by South African Cane Growers' Association, Mount Edgecombe, South Africa.
- Coetzee G (2003). Agricultural finance in South Africa. In: WL Nieuwoudt and J Groenewald (Eds), *The Challenge of Change: Agriculture, Land and the South African Economy*. University of Natal Press, Scottsville, South Africa.

- Cook ML (1995). The future of US agricultural cooperatives: A neo-institutional approach. *Am J Agric Econ* Vol. 77, No. 5.
- Cook ML and Iliopoulos C (2000). Ill-defined property rights in collective action: The case of US agricultural cooperatives. In: C Menard (Ed), *Institutions, Contracts and Organisations*. Edward Elgar Publishing, London, UK.
- Huntley JK (1966). The sugar industry Central Board Its origin and functions. Unpublished Paper, South African Sugar Association, Mount Edgecombe, South Africa.
- Jackson D (2007). Pakhamisa Initiative Project Proposal: Application for Grant Funding. Productivity SA; Pretoria, South Africa.
- Makhura MN (2008). Rethinking agricultural development finance in South Africa: Options for implementation. *Agrekon* 47(1): 1-18.
- McCarthy J (2007). Integrative Report: Generic Economic and Social Impacts of the Sugar Industry in the Context of Milling Areas. University of KwaZulu-Natal.
- Nieuwoudt WL (1990). Efficiency of land use. Agrekon 29(4): 210-215.
- Nieuwoudt WL (2004). Cash flow problem of purchasing land by poor farmers. *Proc Pacific Rim Real Estate Society* 1-21.
- 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: 215-225.
- Ngqangweni S and Hendriks S (2003). Promoting income and employment growth in rural areas through smallholder agriculture. In: WL Nieuwoudt and J Groenewald (Eds), *The Challenge of Change: Agriculture, Land and the South African Economy*. University of Natal Press, Scottsville, South Africa.
- South African Sugar Association (2007). Sugar Industry Administration Board: Schedule of Deliveries (2006/7) and IA/47/29 Annual Survey of Areas Planted to Cane and Areas Harvested (2007). South African Sugar Association, Mount Edgecombe, South Africa.
- South African Sugar Association (2008). Economic Transformation. http://www.sugar.org.za/EconomicTransformation75.aspx. [Accessed 14 July 2008.]
- Thomson DN and Bates RF (2005). Creating an environment for success by land redistribution: Some challenges for the sugar industry. *Proc S Afr Sug Technol Ass* 79: 89-95.