POTENTIAL OF, AND CONSTRAINTS TO, SMALLHOLDER SUGARCANE PRODUCTION IN SWAZILAND

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Abstract

Smallholder development in Swaziland first occurred in the 1960s with the establishment of Vuvulane Irrigated Farms. Some smaller projects followed about twenty years later, and major expansion plans were put forward in the early 1990s. This larger development is mainly on Swazi Nation Land (SNL) in both the North and South of the country. This paper reviews the successes and failures in the earlier projects, and uses this information as a guide to meet the challenges of the new expansion that is planned.

The main parameters discussed are yield, labour, finance, land, administration, skills, group associations, individual participation, extension and research. The overall objective is to use the information as a guide to new smallholder development. In addition, a method of evaluating success in the context of smallholder development will be examined.

Introduction

Sugar is regarded as Swaziland's most valuable export ('Swazi gold'). Sugarcane production has been predominantly on title deed land and owned by multinational companies or medium to large-scale individual farmers. These companies and estates provided much-needed employment to a large number of Swazis. Smallholder sugarcane production began only in the early 1960s with Vuvulane Irrigated Farms, a Commonwealth Development Corporation (CDC) sponsored scheme. CDC felt that a more direct involvement of the Swazi nation was desirable as an economic empowerment tool to the small Swazi farmers, and donated land to the farmers on a free, lease-hold agreement. This project involved moving farmers from their traditional home areas to new smallholdings in the irrigated lowveld. The project started with 30 smallholdings and grew to 264 with farm sizes ranging from three to seven hectares. VIF has since concluded that four hectare farms are the best compromise between giving each grower a reasonable income and maximising the number of participating growers. In 1983, the CDC handed the scheme over to the Swazi nation under a new company called VIF Limited, but remained as corporate managers.

About 20 years after the establishment of VIF, similar projects followed on communally held SNL. Farmers on SNL do not have title deed over the land they occupy, as it is held in trust for the Swazi nation by the king. The major challenges for growers on SNL are access to finance and the availability of irrigation water. Previous developments in these areas were slow due to lack of funding and commitment to develop land that the farmer does not own. Farmers in these areas were previously involved in subsistence maize production or commercial crops such as vegetables and cotton. Quite often, even where water was available, these crops did not yield satisfactory returns for various reasons, including lack of markets for perishable vegetable crops and low returns from cotton sales. It is for this reason that financial institutions were less willing to provide assistance to small-scale farmers on SNL. Availability of finance was made easier by an undertaking by the sugar millers to deduct loan repayments from growers' sugarcane sales and deposit these directly into loan accounts.

Discussion

Land

Land is a basic requirement for any farming operation, and can be used as collateral for loans. Farmers on SNL use it for farming and residential purposes. However, this type of land may not be used as collateral for loans. Occupation of SNL lasts as long as the inhabitants are acceptable to the traditional authority, and some new sugarcane farmers have recently been evicted. Other disadvantages of SNL include the small size of the units and the lack of flexibility for expansion or changing possession. However, if a farmer has other ways of providing security to moneylenders, SNL has the advantage that the farmer does not have to pay for the land as the principal farming resource. Occupation of SNL can be on an individual or group basis. Sizes are often larger per farmer for individually owned land than when a group of farmers are given land to share, as the authorities want larger numbers of farmers participating. Group-owned land is often associated with internal disputes, poor individual participation, and lack of skills and development. Each member does not have an identifiable unit of land for which he is responsible, as in the Magwanyane Farmers' Co-operative Society. When disputes occurr, productivity and yields are at their lowest levels. In some cases fighting is between the group and members of the community left out of the scheme, and premature burning of sugarcane fields has occurred as a result of these squabbles.

Access to land can also be through donated land (e.g. VIF), where farmers are given long-term free leasehold. In most cases the land is donated by multinationals or is on farms purchased by government for resettlement. There are four main criteria for selection:

- The farmer must be a Swazi
- He must be healthy and with unblemished character
- He must be prepared to make his home in the new settlement
- He must be a married man, with family labour, who has proved to be a good farmer in his traditional home area.

The land sizes are also often too small for meaningful returns, as the donors' preference is to see a large number of beneficiaries. These holdings are often left with the elderly men or women while young men seek employment elsewhere.

Other smallholdings are on title deed land and this may be used as collateral for bank loans. Title deed land may take time to pay off and as such is not easily affordable to the small-scale traditional farmer. Smallholdings on title deed land are generally better developed because the inhabitants are owners and got into farming out of self-motivation to improve their wellbeing.

Finance

It is very difficult to obtain a loan for farming on SNL, as there is no title deed for collateral. At one time the local development bank accepted livestock as collateral, but after experiencing difficulties in recovering loan money this was stopped. Fortunately the millers acted to support the sugarcane farmers. They guaranteed direct repayment of loans into loan accounts after the sale of the crop to the mill. As the industry is organised and regulated, it does not allow a sugarcane farmer to sell his crop anywhere other than to his local mill. This enables the moneylender to recover loans on time. This has been very successful.

Most farmers obtain loans from government-sponsored financiers as well as some local banks. Those on SNL are required to produce the following documents:

- A letter from the local Chief allowing the farmer to use the land for sugarcane farming.
- A water permit
- A sucrose quota from the industry Quota Board
- A business plan

Small-scale farmers are also encouraged to form group associations when applying for loans to minimise the high transaction costs as well as risks of failure. For these reasons sugarcane farming is the most successful farming operation on SNL.

Labour

Most smallholdings are established in the belief that family labour will always be available, but this is not true in most sugarcane smallholdings. The young and energetic family members prefer to go for better paid jobs in cities or industries. Those left behind are forced to employ other elderly neighbours to assist in field operations. Conflict of interest arises in situations where co-operative societies with small land sizes employ managers for their farms. Due to the low returns that have to be shared some members end up seeking employment as labourers under the manager. They now report to the manager they employed. The situation becomes worse when they are also members of the executive committee to whom the manager reports. The employment of managers has not yielded the expected returns because these managers tend to take advantage of the lack of unity among farmers in the group as well as farmers' ignorance. Farmers often realise too late that their managers are 'ripping them off'.

However, the situation is different in individually owned smallholdings. These are often larger in size and usually have always been family-operated. The returns are usually sufficient to pay for labour (family or outside). Harvesting labour for smallholdings is on contract by the group/association because of the small amount of sugarcane that is delivered to the mill by each small holder. Daily deliveries by each farmer are too small to handle. Co-operative societies are justified only for specific operations that enable the farmers to afford services that would otherwise be too costly to the individual grower. These operations include input sourcing, harvesting and associated transport, land preparation and crop ripening.

Yield

Smallholder sugarcane yields fluctuate more than the industry mean cane yield. These fluctuations are associated with internal disputes or changes in leadership, and to a lesser extent from climatic or environmental factors. Figure 1 compares average sugarcane yields for four smallholder projects with the industry average. All the smallholdings' yields have reached or exceeded industry average at some point and this shows that they have the potential to do better. VIF yields appear to be the most consistent. This is because each farmer has his own land to manage assisted by a private company, extension service, inputs and other services on credit.

Magwanyane Farmers' Co-operative went out of production for five years in 1985 following the destruction of their irrigation water reservoir by cyclone Demonia the previous year. This is an isolated scheme of about 100 ha and financing reconstruction of the dam for irrigation water was a challenge. Fluctuations in yields in this co-operative are associated with changes in management. Some managers diverted inputs intended for sugarcane to their own farms or for sale for personal gain. Officials from the Commissioner of Co-operatives' office are still adamant that co-operatives must employ managers and that the executive committees must not interfere with management of the scheme. This appears to be unworkable and hinders development. Low yields on good soils can be attributed to a high proportion of under or non-performing individuals within the Co-operative.

There is still room for improving yields on smallholder sugarcane farms. Farmers need to be better organised in the following respects:

- Irrigation water infrastructure
- Farming inputs
- Co-operative harvesting associations
- Secondary seed cane schemes to provide healthy seed cane

Smallholder farms generally have better soils. The highest sugarcane growth rate has been from smallholder farms on SNL. This could be due to the fact that large-scale growers have expanded to marginal soils. Another area where there is great potential to improve output per unit of land would be intercropping. This would involve planting a short-term crop alongside the sugarcane crop. This would improve cash flow and help finances.

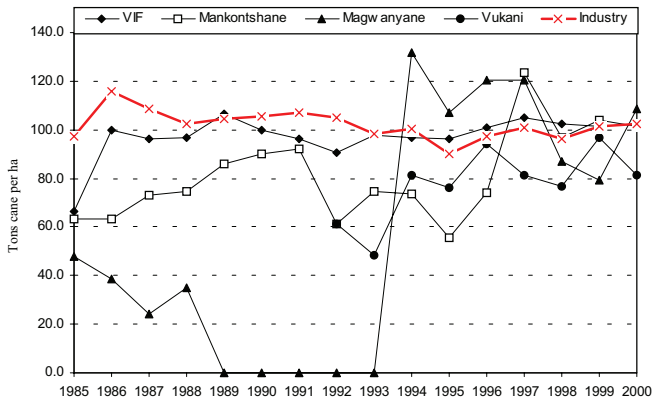

Figure 1. Industry and some smallholder average tons cane per ha since 1985.

Extension and Research

Extension Officers from the SSA Extension Services, the millers, smallholder administrators and the Government (Ministry of Agriculture) all provide extension. Millers provide extension to growers in their supply area. At VIF, the administrator provides extension as well as farm inputs on credit. Extension Services and government officers assist all small-scale sugarcane growers in the industry. Trading companies also provide specialist advice on the use of their products. Extension Officers work together to ensure uniformity and consistency of advice given to growers. There is a need for Extension Officers to meet at least once in two or three months to share ideas and experiences, and discuss problems in the extension work.

The South African Sugar Experiment Station conducts most of the research work while the Swaziland Sugar Association carries out selective and adaptive research investigations. The latest information is transferred through newsletters and bulletins that are available to the Extension Officers and growers. The limiting factor for growers is their educational background. They receive the newsletters and bulletins but many cannot read or fully understand them. This could be improved by translation of documents into the common language. There is a need for research that is specifically aimed at addressing smallholder problems like intercropping, smallholder farm management and group/associations administration skills.

The most effective method of imparting technical knowledge to growers is through training and demonstrations by relevant technical experts. Such training should include sugarcane husbandry, management, tractor maintenance, record keeping and budgeting. This formal training is conducted every year and two people attend each year per association. Sometimes the wrong people are sent for training, from co-operatives where members share the sugarcane fields. They attend sessions and yet they do not work in their fields; instead they employ managers and labourers to do the work for them. Training must be focused on the people doing the job.

Field visits are arranged where growers visit each other's fields and larger estates. They compare their agronomic practices with the estates and help each other if there is something that is not done properly. During the farm visits topics are discussed and discussions occur with officers from Extension Services or the Estates. Extension Officers visit growers regularly to give on-field advice to individual growers, which is more effective since it is a one on one situation.

Groups and associations

Growers organise themselves into groups either by combining their fields into one management unit or joining forces in specific operations that may be difficult to achieve on an individual basis. These groups may be registered as one of the following:

Farmers' Associations: Individual farmers manage their own fields and the association assists in organising finance for specific field operations such as harvesting, land preparation or ripening. Vukani Farmers' Association is one such an example. There is one irrigation pump and one harvesting team in an area of about 150 ha belonging to four farmers. Each is responsible for his crop husbandry. The advantage of this is that individual participation and skill development is greater. However, if one farmer is unable to service his loan, the whole association is liable to service the loan. Record keeping is essential for the correct allocation of costs and returns.

Farmers' Co-operatives: The Farmers' Co-operatives are advised to employ a manager and the members either do nothing or are employed to do manual work in the fields. The major setback in this situation is that the growers do not develop meaningful skills. They leave it to the managers, and it takes time to identify problems. However, co-operatives receive free assistance from the Ministry of Agriculture and Co-operatives in auditing their books.

Companies: Here the farmers manage their own fields and the company assists in organising finance and specific field operations such as harvesting, land preparation and ripening, as with the donor-funded smallholder farms (VIF). The companies also provide an extension service and infrastructure maintenance at a small fee, as well as inputs on credit.

Group associations are essential for growers to benefit from combining operations that are too small or too big for individual growers. However, the extent of association must be clearly defined while general management of smallholdings must remain with individual growers. This will improve the level of commitment, motivation, skill development and cost-effectiveness.

Conclusions

Smallholder sugarcane production in Swaziland has been in progress since 1960 (VIF). This paper reports on the progress of smallholder development on both freehold and Swazi nation land (SNL). It also proposes future development on the basis of past performance. It is acknowledged that quantified data are confined to yield, as this is the main output of the smallholder. Qualitative information was also collected from senior representatives within the smallholder sector. It is clear from performance that smallholder production can be close to the industry average, but it is often below this due to the wide level of variability within and between schemes. When making yield

comparisons it must be appreciated that the smallholder schemes have intentionally been on the better soils. This helps smallholders overcome the management and financial constraints that are common. In fact, the highest tons cane per month has been from smallholder farms on SNL. The main thrust must be to try and reduce the variations in yield that occur. This could be due to climate (cyclone Demonia), social problems (infighting between those within and from outside the scheme), the late procurement of finance (non-availability, late or inadequate planning) and management shortcomings (Farmers' Co-operatives employ managers who are often less well trained than the members who tend to play a passive rather than a proactive role).

The most consistent results have been from smallholders occupying freehold land (e.g. VIF) previously owned by companies (e.g. CDC) where there is individual accountability by the member and collective responsibility from the miller who provides advice and assists in sourcing finance. The optimum size of land holding is from one to four hectares with the larger areas being preferred for economic reasons as well as for the ability to employ one's own labour. Farmers group themselves into either Farmers' Associations (e.g. Vukani Farmers' Association with individual ownership in a group comprising 150 ha) or Co-operatives (e.g. Magwanyane).

The benefit of the Association is the high level of individual participation and increased skills development. In addition, contract work for core business such as harvesting, transport and chemical ripener application has distinct financial advantages from the increase in scale of operation.

Farmers' Co-operatives employ mangers responsible for the field work. Members often lack initiative and do not get involved, and often management skills are also lacking. Some co-operatives have a preponderance of older men and women as members and this can result in labour being scarce or in low productivity. Employing labour reduces family income as holdings are so small. There is a lack of individual accountability and collective responsibility. Management and financial skills are generally poor. Co-operatives have the benefit of an annual financial audit by Government.

Future schemes should be developed around an integrated partnership between the smallholders and the mills as these have proved to be of most benefit to-date. Individual responsibility for field husbandry but collectively arranged contracts for key operations such as irrigation system procurement, harvesting, transport and chemical ripener application contracts have the best chance of social and financial success. Finance can be guaranteed by the miller, who has the most complete knowledge of production needs in both the extension and milling roles. Finance institutions have security when the miller is authorised by the grower to recover loans on behalf of the lender.

The following factors that are being addressed at present, could also have a large impact on smallholder performance in the future:

- Land tenure and the possibility of leasing SNL has been addressed in a land study that is awaited.
- SIDC (Swaziland Industrial Development Company) has recently been more proactive in lending money to smallholder developments. Its role needs to be more clearly spelt out and money guaranteed over the medium to long term. Linkage with donors or the Swazi Bank should be investigated further.
- Extension needs to be integrated so that all parties are involved with common goals (Technical Services – previously Extension Services – the Miller, SASEX, Commercial Trade (herbicides and fertilisers), Government, Swaziland Komati Enterprise Project, Associations and Co-operatives. A document is being prepared to make recommendations that will link all interested parties into a co-ordinated extension plan before the large scale development of smallholder production takes place.

Future smallholder development must take cognisance of the following:

- Effect of HIV/aids on labour availability and the ability to mechanise.
- Distance from the mill should not exceed about 80 km.
- Water must be available even in years of severe drought.
- Smallholders need an integrated farming systems approach which takes into account use of green cane tops for feed in winter and use of animal manure, intercropping (a study with trials is underway) and break crops for food security.
- Future developments must be well planned to cater for risk. This planning must include appropriate legislation, finance, labour, water availability and also good road/rail/bridge infrastructure for transport of the cane to the mill.

Acknowledgements

The authors would like to thank the following for their input: Mr. Paul Arnot (VIF General Manager); Mr. Peter Dlamini (VIF Agricultural and Extension Manager), Vukani Farmers Association and the Executive Committee of Magwanyane Farmers' Co-operative.