

THE CANEFARMS BUREAU BOOKKEEPING SERVICE: PAST, PRESENT AND FUTURE

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Abstract

The CaneFarms Bureau Bookkeeping service has been available to growers since 1976. This paper covers the development of the service since its inception. During 1997 a significant step in the development of the service was taken with the conversion of the processing from a mainframe based to a PC based system. This paper will identify the reasons for changing the processing system and the advantages of the new system. Finally, future developments of the service will be identified.

Introduction

South African Cane Growers' Association (SACGA) has provided a bureau bookkeeping service since 1976. The service is known as CaneFarms, which is an acronym for Cane Farm Accounting Records Management System. The service has two objectives: firstly, to provide the Association with up to date cane production costs and trends vital to SACGA for purposes of cane pricing, policy and forward planning, and secondly, to provide individual growers with a bookkeeping and financial planning and management service.

The service has developed over the years as the requirements of SACGA and individual growers have changed. During the past two years significant changes have taken place with data processing converted from a mainframe computing system to personal computers.

It is opportune at this stage to review the past operating of the CaneFarms service, to expose some exciting changes taking place with the introduction of the new system and to explore possible future developments.

The past

Before CaneFarms

In the past, proceeds from sugar and molasses sales were divided between growers and millers on the basis of the costs of production. SACGA was tasked with collecting cost data from growers. Growers' financial information was collected through the respective growers' financial statements, once these had been completed. Two problems arose:

- There was a significant time lag in getting data. In most cases two year old cost data was used to establish current cane prices. This problem was made worse by the fact that inflation was at double-digit levels. In addition farming practices were changing at a fast pace, making base data outdated.

- Expansion of cane growing into the Midlands and the then Eastern Transvaal (now Mpumalanga) resulted in the inclusion of a number of growers who were involved in other enterprises as well as cane farming. Since their accountants rarely if ever split cost items between cane and the other enterprises, the figures from these growers could not be incorporated into the cost survey. This was a problem because cost information was required to be representative of all regions producing cane. During 1974 a pilot project was started in the Eston area to collect financial information manually. There was some resistance to the project as it involved additional work for participants.

Development of the CaneFarms program

During 1976 members of the Association staff carried out an extensive investigation of computer schemes operating in the USA, Canada, Great Britain and the Netherlands. Using information collected from this investigation the CaneFarms program was designed.

In 1976, 30 growers used the CaneFarms service on a test basis. CaneFarms was run through the South African Sugar Association IBM 4341 computer using the DOS/VSE operating system. The on-line system used was CICS/VSE and on-line transactions were written using the Mantis language.

During 1977 the number of growers using the service on a test basis was increased to 60. The service was made available to all growers during 1978, with a fee being introduced to those using the service. With the increase in number of participants and resultant increase in computer processing, certain deficiencies in the original design of the program became apparent. In addition the needs of both SACGA and growers had changed, which resulted in additional elements being added to the program. Unfortunately there were no manuals on the original program or changes and additions made to the original program.

The CaneFarms system

The CaneFarms system is based on a cash transaction approach, which uses the bank statement as its source document. Information on cheques, deposits and stop orders are all captured from this document. Information on transactions that do not take place through the bank account, e.g. petty cash, is provided by growers on separate forms and submitted by them to CaneFarms.

Physical data on cane production and area under cane are collected at year-end to allow the compilation of comparable information. The system is operated as follows:

Coding

A simple code system has been developed. To facilitate comparisons all growers use the same codes for the major code centres. Details within the major code centres can be client specific. This allows a great deal of flexibility as clients can receive information as detailed as they may require. Codes are short, consisting of an alphabetic prefix denoting enterprise and a three digit numerical cost item code. Four digit detail codes can be added. Clients code all cheques, deposit slips and petty cash forms. Cheques and bank statements are received by CaneFarms directly from banks; deposit slips and petty cash forms are posted to CaneFarms.

Cheque books

SACGA has personalised cheque books printed for clients, in which space is provided for the description and coding of transactions made.

Mill statements

Illovo Sugar mill statements are posted by the miller directly to CaneFarms. Tongaat-Hulett mill statements are sent to the growers, who forward them to CaneFarms.

Data capture

Data on illegible cheques are captured on input sheets. Deposit information, stop orders, petty cash information and other information is captured on input sheets. Input sheets and legible cheques are sent to a punching bureau for punching onto tape. SASA's computer then reads these tapes and monthly reports are printed.

Monthly reports

Monthly reports are checked by the bookkeepers. Any queries are listed for the growers' attention. These reports are then mailed to the client. Answers to queries received by the bookkeeper are fed into the computer.

Year end

Shortly after the farmers' year end the regional economist visits them. At this visit the following is carried out:

- Outstanding queries are answered.
- Current account balances are checked and corrected where necessary.
- Missing cheques are investigated.
- Outstanding debtors and creditors are raised.
- Re-allocation of expenses allocated to a general enterprise are determined.
- Audit list and reports are checked for errors.
- The code sheet is updated where necessary.
- A budget for the forthcoming year is drawn up.
- Additional information relating to physical data is gathered.
- The previous year is reviewed relating budgeted to actual figures.

Annual schedules

When the final report had been run the regional economist inputs physical information, information on stocks and on-farm use of farm produce. The regional economist checks that all costs are categorised correctly. Thereafter the annual schedule is run and checked by the regional economists.

Reports

On a monthly basis growers receive the following reports:

- Income and expenditure report for the current month and year to date. These figures are allocated to their relevant enterprise.
- Bank reconciliation for each bank account.
- Petty cash report.
- Analysis of co-operative account.
- Report on hire purchase accounts, Land Bank loan accounts and savings accounts.
- Value Added Tax (VAT) report.

On an annual basis growers receive an annual schedule showing:

- Detail on return on capital.
- Detail on return on labour expenditure.
- Income and expenditure per ton cane, per ton sucrose and per hectare for the current season, past season and the regional mill averages for the previous season.

Client numbers

Client numbers increased dramatically from inception through to 1983-84, peaking at 282 (Figure 1). Thereafter client numbers declined through to 1993-94. More recently there has been a significant increase in client numbers, mainly due to growers who purchased the former miller-cum-planter estates making use of the service.

Strengths and weaknesses

Strengths

The CaneFarms service used the same basic program from 1976 to 1996 with very few changes. The major strengths of the system were:

Simplicity

The CaneFarms system is based on a simple four digit code structure, which enables growers to describe a cost or revenue item at point of payment or receipt, i.e. when making out a cheque or when depositing income at a bank. Grower's input into the system is thus kept to a minimum. This code structure has not changed since the inception of CaneFarms.

Flexibility

The grower can enter at a beginning level and progress to more advanced levels of enterprise and within-enterprise details. The system caters for single enterprise farms (cane only) with few details, to multi-enterprise farms with everything detailed, e.g. every vehicle is costed separately.

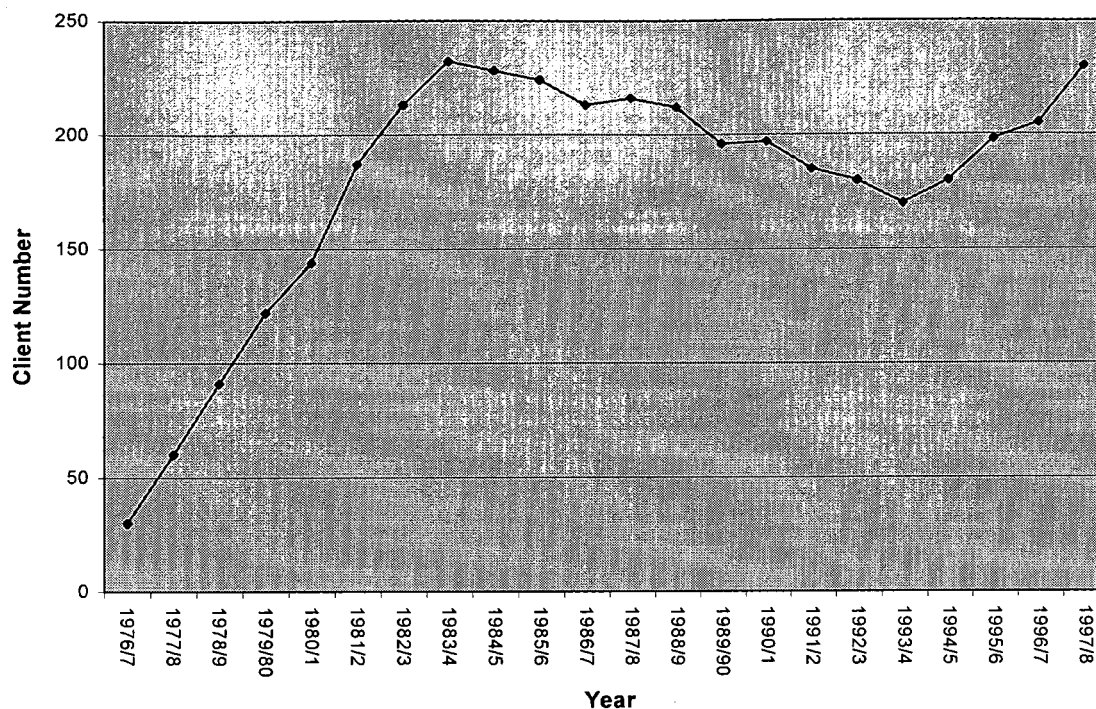


Figure 1. CaneFarms client numbers.

Accuracy

Since bank reconciliations are prepared monthly, all amounts passing through the bank are captured. Monthly reports and audit listings are checked by the bookkeeper and regional economist, thus minimising errors. Comparing a grower's figures per ton and per hectare with group figures also reveals errors.

Up to date

The CaneFarms system provides SACGA with up to date information for pricing and policy purposes. Accountants seldom have current financial statements available, which would result in decisions being made on historical information, if this source was to be relied on. For the individual client, CaneFarms provides up to date information for tax planning.

Contact

Growers using this system have contact with their regional economist at least once per annum at year end. The regional economist has reliable information for the individual to base any advice on. Each client is assigned a bookkeeper who deals with this account. The client can contact that bookkeeper if there are any queries.

Comparisons

Since there are over 200 clients using the system, growers can compare their figures with averages. Certain mill areas are better represented than others.

Weaknesses

Programming

Most problems can be related to the way CaneFarms ran on the mainframe computer. The original program was written in 1976 with additions tacked on since then. Since there was no documentation on the program and because no programmers at South African Sugar Association (SASA) Data Processing understood how the program was written, the following problems arose:

- Time lag – there was a slow turnaround of growers' data since the program was run only once per week. Although overnight processing would have been ideal, no programmer knew the program well enough to implement this change at a reasonable cost.
- Data extraction – it was not possible to draw down a single grower's information or interrogate aspects of the grower's financial figures. Once again programming to allow for extraction and manipulation of data would have been costly.
- SASA data processors feared that any major changes to the program could have resulted in a complete collapse of the program.

Peak period bottlenecks

Over 90% of the clients are February, March or April year-ends. This means that the workload for bookkeepers and regional economists is not spread evenly throughout the year.

The present

Why change?

The CaneFarms system had been providing both SACGA and growers with their requirements for over 20 years. The decision to change to a new system was based on the following:

- All SASA programs will be removed from the mainframe by April 1998. The future of the mainframe used is not guaranteed. In addition, the Mantis licence would have been too costly for SACGA to maintain when SASA's contribution was withdrawn.
- Planning for a new system had to begin early, if the mainframe computer was to be relocated. After investigating alternatives it was decided to move to a PC-based package. Programming changes are costly, and in some cases impossible to implement in the old system. There is a demand from some clients for enhancements, which SACGA would like to introduce. Most software packages investigated include the required enhancements.
- SACGA had no control over data processing costs. By converting the system to SACGA personal computers, future costs would be totally under SACGA's control.
- The past system received some criticism from certain accountants who felt that accounting disciplines were not followed. Present software packages acceptable to accountants were investigated.
- Information technology has advanced considerably since 1976. A new system would allow for more efficient flow of information and enhance communication with clients.

Why choose the FarmPlan package?

Having decided to investigate new packages certain principles were set. The grower's involvement in the system should, as far as possible, remain unchanged. The coding system, identified as a strength of the system, should not change. The reports should present what the growers had received in the past and include the enhancements identified by clients and SACGA as being desirable. The functions of the bookkeeper should not be rendered too complex.

A number of alternative financial software packages were tested. The FarmPlan package was identified as meeting the principles set by SACGA. The FarmPlan package originates from the United Kingdom (UK), which does result in some problems. Certain legislation, such as Value Added Tax (VAT), is dealt with differently in the UK. Difficulties with the program cannot be dealt with immediately. Fortunately, FarmPlan has appointed Deloitte as their agent in South Africa, which gives the package local backup. The conversion to FarmPlan began during 1996, and results to date indicate that the package is providing the necessary information.

What does the grower get?

The FarmPlan package provides reports that can be used by the client for four purposes:

Value Added Tax (VAT)

Legislation requires growers who are registered vendors to submit VAT returns either on a two monthly or six monthly basis. If the client provides CaneFarms with necessary information, reports can be used to determine the amount payable to the South African Revenue Services and the required forms can be completed.

Accounting

The FarmPlan package follows all accounting disciplines and is marketed through an accounting firm. Reports produced from CaneFarms can be used by accountants to assist in compilation of financial statements for their clients.

Communicating with bank managers

The inclusion of a cash flow budget in the system allows for comparisons of to-date actuals with to-date budgeted figures. These reports, coupled with projected figures for the remainder of the year, can be used by clients when discussing requirements with bank managers.

Management

The system provides a number of reports to assist the client in monitoring and controlling his financial business management. By monitoring his cash flow reports the client can time expenditures to minimise interest expenses and can make use of alternative investments to maximise returns. Interrogation facilities allow growers to investigate any aspects of their business. Enterprise reports allow the client to ascertain the profitability of different enterprises.

What changes have occurred?

Data input

The major change is in terms of data input. This is now done by each bookkeeper, whereas formerly it was performed by an outside data-punching bureau. This allows a quicker turn-around time for information, with reports being printed out and dispatched as the bookkeeper completes them. Another advantage to bookkeepers inputting the data is that they get to know the client's information in more detail.

Reports

The program has numerous reports, which supply information on almost any aspect of financial business of the farm. These reports are better presented by FarmPlan than they were by the previous system.

The future

Accounting information

There are enhancements to the present service that will be investigated in future:

Draft Balance Sheets and Income Statements – the program has the facility to produce these reports, although a fair amount of information would be required from the client before this is possible.

Value Added Tax – FarmPlan UK has been approached to make the necessary changes to accommodate South African VAT reporting. The ideal is for the program to produce the form that the client is required to submit to the SARS.

Other – CaneFarms staff will investigate available reports to determine what other information might be useful to clients.

Communication and information technology

Over the past year the regional economists have been connected to the SACGA local area network through a modem link. In the future direct contact with individual clients will be investigated. The means to print a client's report on his farm will be explored.

Promotion

When the program has been used for long enough to sort out initial problems, SACGA will begin to promote the service to growers. Promotional activities will be concentrated in areas where client numbers are low.

Conclusion

The past year saw a change in the CaneFarms system, which has been in place since 1976. The change has been the use of the FarmPlan package in the CaneFarms system and in the way data are processed and results produced. Clients' input, which has always been recognised as a strength of the system, has remained largely unchanged.

The new system provides the reports necessary for the preparation of VAT returns, provides accountants with the necessary base information to prepare financial statements for clients, facilitates communication with bank managers by providing cash flow reports and assists the client by providing excellent management reports.

The staff of SACGA is exploring possibilities for improving and adding to the present service. Opportunities arising from changes in information technology will be investigated in the future.