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FARM CHEQUE - DEVELOPING A RECORDKEEPING SYSTEM IN NSW

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By

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1. Introduction

Using and analysing information to monitor and improve business performance is well accepted in almost every area of business of Australia. Perhaps the only notable exception to this has been agriculture. Yet for probably at least a century farmers have been told that there is a need for on-farm records. In the late 1970s a small percentage of farmers kept useful records (Hardaker et al, 1981).

There are good reasons for this lack of interest in record keeping. Farms are very complex businesses, often producing a considerable diversity of output, each having it's own distinct cost profile and resource use pattern. Before the advent of the computer it was often difficult if not impossible to use information collected over many years for farm management decisions. In the 1960s attempts were made to use mainframe computers to assist in the analysis of farm records. These schemes also met with limited success, perhaps due to the remoteness of the computer from the farm, the limited use to which the information could be put and the uneven quality of information provided (Godyn et al, 1988).

Farming based on sound technology and business practice is becoming increasingly important. The relentless price/cost squeeze combined with an increasingly competitive export market are forcing farmers to improve their resource allocation. Issues such as soil degradation and pollution also put pressure on farmers to query their resource use and agricultural output.

Farm cheque (FC) is major initiative by the NSW Agriculture & Fisheries (NSWAF) to improve farming efficiency.

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2. Objectives and functions of Farm Cheque

The objectives of FC include the following:

- To develop a decentralised recordkeeping service based on micro computer technology and farm secretaries (FS).
- To use this service to provide better advisory service based on integrated technical and financial advice on a whole farm basis.
- To establish data base founded on accurate farm records, for policy and research purposes.

Figure 1 gives the functions of FC. Financial and Physical information is collected by farmer members (phase one). Farm secretaries record this on microcomputer on a monthly or quarterly basis (Phase 2). This information is used for three types of reports: financial, farm management and comparative analysis. Financial/taxation reports can be called up for any 12 months recorded.

Financial information can be used for forward planning, using an integrated cashflow budget. This information can be down-loaded into three main accountancy programs used by accountants (see section 4).

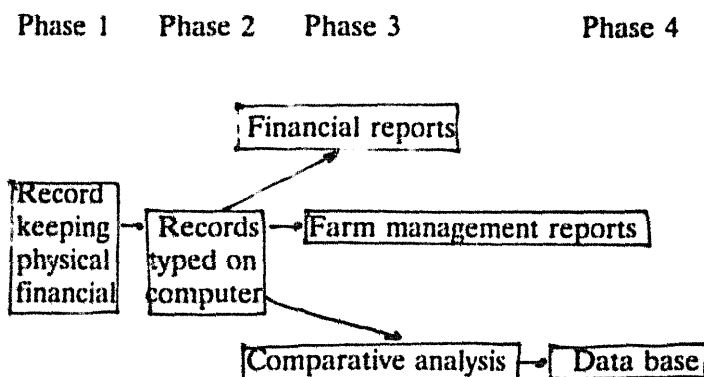
Farm management reports are usually printed once a year. These reports link costs to income years and combine physical and financial information (See appendix 1).

Comparative analysis reports are generally completed once a year. These enable farmers to compare their performance to the highest, the lowest and average performance per enterprise for a group or district.

A data base will come in operation in 1991 (see section 9).

The program is fully integrated with all data entered only once and used in the various reports.

Figure 1 Farm Cheque functions



3. Size of the scheme.

Farm Cheque commenced in 1987 with two district groups in the South East and Illawara region of NSW. In 1990 NSWAF appointed three regional coordinators, a state coordinator and a special economist to extend and manage FC. Currently some 15 farm cheque groups have been formed in NSW and by July, 1991 some 20 groups are expected to have formed in the state.

4. Linkages with private enterprise

From the onset FC has forged links with private enterprise. Farmer-members are part of the private sector. all farm secretaries employed are privately employed. client farmers employ them on an hourly basis according to their data entry and report requirements. The farm secretary is trained and supervised by regional coordinators employed by NSWAF.

Software development was a joint project between NSWAF and Ag-Data Australia. After evaluating all electronic cashbook programs available in NSW in 1988, Phoenix developed by Ag-Data was selected as the most suitable financial program. The farm management component and comparative analysis component had to be grafted on this. NSWAF entered into contract with Ag-Data, whereby NSWAF would provide the algorithms for the new program and Ag-Data would write the program in Turbo Pascal. The Farm Management model and the comparative analysis of the program are jointly owned by NSWAF and Ag-Data

It was realised that accountants could potentially play an important role in FC. The information collected throughout the year contains all the detail required for the end of year tax report. Many of the reports provided by the Phoenix component of the software overlap with traditional accountant's reports. As a result FC met with some resistance from the traditional bookkeeper type of accountant. Some felt that the sorting out of the income and expenditure dockets of farmer clients was their sole preserve. Others expressed delight when account summaries were presented to them at the end of the year, enabling them to concentrate on providing taxation and financial advice to their clients. Some duplication remained. Accountants usually have their own accountancy software and data still had to be manually transferred from FC summaries to the accountant's program. Most accountants use Solution 6, Paxis or CEE-Data. Ag-Data has since developed a program that enables an electronic-down loading from FC software to these three programs, overcoming the disadvantages of the need for re-entry of data. This linking program is available free of charge to cooperating accountants. Joint FC groups have since been started with two accountants in NSW. The accountants basically fulfil the farm secretarial role and enter all relevant financial and physical information on FC software. Regular meetings are held with client farmers, which can be initiated and attended by both NSWAF staff and accountants. The farm management comparative analysis report day is attended by both parties, accountants providing a financial input and NSWAF providing farm management/ technical advice to client farmers.

Financial support was another area of cooperation between FC and private enterprise. Banks were identified as one of the beneficiaries of FC. Good on-farm information is important to bankers. FC members have the information, budgets and forward planning facilities available to forecast financial implications of their plans as accurately as possible. This increased accuracy reduces risks. Westpac, the Commonwealth Bank and ANZ Bank realised this and have contributed to support the program.

Currently negotiations are underway with computer companies wishing to support.

5. Educational and training aspects

One major benefit of FC is its educational aspects (Burfitt and Godyn, 1988). Training is directed at the following groups:

1. Farmers need to be training in recordkeeping, both of physical record and of financial records. Physical records are usually kept in the FC farm diary. Farmers also receive training in cashbook keeping. It is felt that even though not all farmer may want to continue keeping a cashbook and many will rely on FS putting information straight on to the FC electronic cashbook, there is educational value in learning to keep a cashbook the manual way. It leads to a better understanding of the FS requirements and of the FC reports produced from the information.

Farmers also need workshops on the reports and farm management criteria produced by FC. Lastly a 1988 survey of FC members showed that 90% of FC members were interested in learning more about computers. FC will in future offer training courses in the FC computer software to assist those farmers who want to purchase their own computer to run the FC program (Burfitt and Godyn, 1988)

2. Training is required for cooperating advisory officers in the areas of farm business management and computer skills and FC software (see section 10.3). Specifically the forward planning features of the program contained in the cashflow spreadsheet, which used to examine the financial implications of a change in resource use, requires the development of additional skills.

3. Training is required by FS in the use of software and the FC chart of accounts (see chapter 10.1. and 10.4)

6. Membership costs to farmers.

Membership fees are \$275 for the first year of membership and \$175 in subsequent years. In addition member farmers pay for the costs. This stands currently at \$28 per hour. The demand for FS time will vary greatly from farm to farm, depending on complexity of operations and the way the information is prepared. In 1988 it was estimated that on average this could be some 1.5 hours per month

7. Ongoing development

Farm Cheque was developed for dryland farming. The program will be extended in 1991 for irrigation farming. There are requests for the program to be extended to the dairy and egg industry and further down the line to sugarcane and cotton. The Farm management program was developed in a modular way so that new farm management modules could be inserted easily at a later stage.

8. Types of reports produced

FC produces a number of financial/accountancy style and farm management reports.

Financial/accountancy reports

- Profit and loss
- Income and expenditure
- Balance sheet
- Detailed ledger reports
- Progress reports
- Transaction lists
- Bank reconciliation
- Returns to investment
- cashflow
- Gross margin budgets
- Physical efficiency criteria

An example of a farm management is provided in appendix 1.

9. Data base

In 1991 a summary of FC results for each district will be published, giving the mean, highest and lowest category in each of the indices. The advantages of such a data bank are discussed elsewhere (Godyn et al, 1988, Sproule and Godyn, 1990)

10. Some problems encountered

Even though the concept of FC is a simple one, a number of obstacles had to be overcome. Problems areas were experienced in the following area:

10.1 Farm secretaries

FS are the foundation stones of FC. Poor performance could compromise the quality of information collected. FS are paid for directly by farmers. Their appointment is by farmer and Farm cheque representatives. Quality control is carried out by FC coordinators.

During the pilot project it became clear that FS required more training than anticipated in the first year. Most were not as computer literate as expected and training in FC procedures took longer than anticipated. The situation was not helped by the fact that improvements in FC procedures and software were put in place during the pilot years. Further some farm secretaries found it difficult to pass on all costs to client farmers. This sometimes lead to grateful farmers but dissatisfied farm secretaries. Lastly the pilot phase of FC, showed that some farm secretaries lacked in entrepreneurial skills or did not possess the required accuracy required for the job.

Although FC currently still coordinates and supervises FS, there is no need in future for this activity. Private FS bureau services are currently operating in Australia and it is possible that FC will in future sign a contract with one of these organisations to take over this responsibility.

10.2 Software

Software development always takes longer then expected. And no sooner is software developed, than a better way of dealing with some aspects is found. This process of delays and changes proved frustrating for all involved. The software side of FC has currently reached a satisfactory stage. The lessons learned with hindsight were that, all involved in the project were optimistic about the time required to develop the product. On the positive side, the product is now better than originally anticipated.

10.3 Advisory staff

The learning curve of advisory staff in FC procedures and the development of computer skills was longer then expected. In NSW advisory officers are specialists in a particular technical area. The financial implications of technical advice provided were often overlooked in the past. Some of the advantages of FC were undoubtedly lost in the first years as advisory staff struggled with the weight of information that came in. Experience showed that training in NSW for advisory staff must include not only training in computer skills but also in farm management and whole farm analysis. In each of these areas a longer training period was required than originally estimated.

10.4 Chart of accounts

One of the most important aspects of FC is that recording takes place in a uniform and consistent way. The chart of accounts developed for FC is important in this context. Opportunities for errors exist particularly where a cost item such as a sheep drench needs to be allocated to more then one enterprise such as a ewe and wether enterprise. This is not always as easy as it sounds and rules and guidelines needed to be developed to overcome any inconsistencies of recording.

10.5 Timelag for results

A fair amount of time, effort and money is involved before the farm management reports and comparative analysis can be produced and farm management planning can commence. At least one year of information is required and often more than one year to ensure that all relevant costs can be allocated against an enterprise income. Hence the scheme does not provide quick answers to clients who join up during a period of rural depression, unless of course they have already kept accurate records over a long period of time and are prepared to pay a farm secretary to put this on computer.

10.6 Comparative analysis

Comparative analysis is a much debated farm management tool in economic literature (Godyn et al). In spite of all its shortcomings it remains an attractive drawcard for farmers, who want to get some idea how well they are performing, relative to their neighbour. Comparative Analysis is a useful advisory tool in the hands of a skilled farm management advisor.

For the purpose of comparative analysis cost and income definitions must be uniformly applied. Much time and effort went into the first year to draw up a conclusive set of rules. But even even the most comprehensive set of rules and their rigorous application could sometimes not prevent unexpected results in the first comparative analysis. For instance a lime application can have a substantial effect on enterprise costs, if the full costs of lime are held against one year. Further, farmers that use contracting services will often end up with the highest enterprise cost and gross margin.

Some of the anomalies were easily overcome, by a further definition of a cost item. Others, such as the use of contractors, remain currently unaltered, and are used as discussion points during the FC group meetings.

11. Influence on software industry.

One benefit of FC has been that it posed a challenge to the software and bureau service industry. FC raised the concept that the accountancy type information used by existing cashbook programs was unsuitable for farm management advice. Accountancy-style programs, although excellent for taxation style reporting, are not designed to link cost items with relevant income periods. The FC program was innovative in that it combined physical information and financial information and produces taxation as well as farm management advice. Some of these concepts have since been adopted by other software houses. FC was the first to integrate a comparative analysis option in its program and this has created debate in the software industry. Further, FC initiated the concept of running a FS bureau service in conjunction with the software program it developed. This concept has since been adopted by others in the industry. FC software created a great deal of interest national level as well as some expressions of interest from overseas.

12. Summary and conclusions

Farm Cheque is a new initiative by NSWAF to improve the efficiency of its advisory services and thus of farms in NSW.

Software was developed to integrate farm management and a comparative analysis into an existing financial/accountancy- style program.

Efforts were made to cooperate with private enterprise where opportunity existed. This led to a pattern of cooperation between FC , farmers, farm secretaries, and some accountancy firms and banks.

Setting up a system like Farm Cheque posed a number of unexpected challenges. A greater then expected effort was required in training. Educational aspects have been identified as crucial to success and training programs have been initiated for farmers, advisory staff and farm secretaries. Software development took longer then expected but as a result the program is currently better then originally anticipated. This sometimes led to stresses and frustrations. Current farm management software is restricted to dryland, but further developments are expected for other rural industries.

At present 15 FC groups operate in NSW and it is expected that the number of groups will expand. This might be expedited as a result of the downturn in the rural industries, necessitating the need to monitor farm performance more closely.

One benefit of FC was that it influenced the software industry of financial programs in Australia. FC software makes a clear distinction between accountancy programs used for taxation purposes and the farm management program used to provide farm business management advice. It produced the first integrated financial, farm management and comparative analysis program for microcomputers in Australia. It further linked the use of software to the need for a farm secretarial bureau service to work in conjunction with it. Some of those elements introduced by FC have already been adopted by others.

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