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FORUM

Why Farm Recording Systems are Doomed to Failure

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Farm financial recording systems of one sort or another have been around for a long time — in fact, just about as long as there have been farm economists. Yet the degree of acceptance of such systems by farmers has been slight. A system that was adopted by, say, 5 per cent of the target population would probably be described as successful. This low adoption rate pertains despite the fact that many systems contain an element of subsidy. Processing of the data recorded may be carried out free or below cost, or at least the costs of developing the system may not be passed on to clients.

These sentiments introduced our tongue-in-cheek thoughts on the topic when we presented them to a workshop held in conjunction with the 20th Annual Conference of the Australian Agricultural Economics Society held February 1976. We have recently wondered if our somewhat jaundiced position then held was appropriate, and if the contemporary revolution in the development of micro- and mini-computers is cause for greater optimism about the possible success of farm recording systems.

Accordingly, we undertook a survey¹ of what we believe to be the main Australian centres of evangelism and support for such systems. Our interest was centred on schemes for recording income and expenses (or payments and receipts) on a whole-farm basis, coupled with some processing of the recorded data to obtain measures of farm financial performance such as gross margins, net income, net cash flow or returns on capital. Whilst our survey was doubtless biased (especially towards the public sector), certainly not comprehensive and, regrettably, featured some important non-responses, our earlier comments on the low level of adoption of such schemes seem still to be relevant.

Why, then, has the degree of success of farm recording (including accounting) systems been so poor? If most farmers have failed to buy the product on offer, it seems that there are only two possible explanations: (a) poor product promotion; or (b) a poor product (in the sense that there is little effective demand for what is offered). The proponents of these systems would probably have us believe that, at least for the products now on offer, the first rather than the second explanation applies. There is no doubt that there is a huge extension job to be done in 'putting across' the advantages of 'proper' financial records to today's farmers but we have been trying to do just that for years with dismal levels of success. In fact, Anderson (1971) reported that less than half of one per cent of Australia's rural producers were using farm management information systems of the kind we are discussing. The indications from our recent survey are that this proportion has declined rather than increased over the past 10 years.

Recent reviews of developments in the application of microcomputers to agriculture (Anon. 1980; Reilly 1980) contain evidence of renewed interest within some institutions in the development of computerised financial management systems

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¹Six of the dozen institutions contacted responded to our request for information. Only two reported any active farm recording schemes with a total of less than 150 clients. At least one State Department of Agriculture reported the demise of its farm recording scheme and other Departments had schemes that appeared to be on the point of expiry.

for farmers. Financial recording is, of course, not the only use proposed for farm mini-computers but before substantial amounts of public resources are allocated to developing and promoting computerised farm financial recording systems, we need to be confident that the modern product really is worth promoting and that the reasons for past failures no longer apply.

We firmly believe that most farmers are rational people, so we consider that they will regard a farm recording system as worthwhile and will participate only if they judge the 'benefits' of the system to be greater than the 'costs'. Costs in this context measure not only the dollar costs of time, stationery, *etc.*, but also the aversion that many farmers have to routine bookwork. Benefits will accrue, according to the conventional argument, from better decisions made on the basis of the recorded information, calculated ratios, *etc.* Most, if not all, farm recording systems are designed ostensibly to improve farmers' managerial decision making by permitting better planning or better control or both.

Planning, in this context, may be defined as the evaluation of medium- to long-term change – a definition which immediately raises doubts about the relevance of historical farm records. Such data are usually both out of date and doubtfully appropriate to the changed situation being evaluated. Costs, prices and technologies tend to change all too quickly, making information on what happened last year or the year before almost irrelevant to planning what to do next year. If the past is an excellent guide to the future, then there is little demand for planning. If not, the past is of dubious relevance for the future. Planning, by its very nature, must be based on forecasts, and the records of an individual farm provide a very narrow data base for making good forecasts. Farm recording schemes structured to provide 'planning' data such as gross margins may be founded on a misconception of the nature of the information appropriate for this purpose.

As those who have had contact with a cross-section of farmers will perhaps agree, many producers regard historical accounts as little more than a matter of curiosity. It is not at all unusual to find farmers who hardly bother to open that long envelope that arrives each year from their accountant. They claim that they don't need a set of accounts to tell them how they are doing – they can tell that from their bank balance. (We are not supporting this view, merely suggesting that it may be a commonly held one.) To say the least, therefore, it seems that these attitudes need to change before farm accounting systems have any real chance of success.

Control is really no more than planning for short-term changes. Indeed, the distinction between planning and control is a very arbitrary, if convenient, one. The idea of using recorded information to improve the control of a farm business has been adapted from industry where, because of the remoteness of management from the production process, these methods are often very relevant. But how useful are control systems in agriculture where production cycles are generally relatively long and where many important variables affecting overall success, such as weather and prices, are totally outside managerial control? There seems to be little point in farmers recording, for example, their month by month payments and receipts and in carefully matching these against a budget when wide divergences between actual and planned results occur all too frequently and for reasons which a farmer usually cannot influence at all.

This is not to say that the concept of control is irrelevant in farming. It is obviously crucial, especially for the more intensive forms of production, but it is in the physical rather than the financial aspects of production where most scope for control exists. Farmers can affect the yields of, say, dairy cows by manipulating feeding, disease and reproduction controls, *etc.* The problem, from the point of view of the disciples of farm recording systems, is that control of many of the technical aspects of production can be achieved by a good manager without resort to records. For farmers used to dealing with physical realities rather than with abstract concepts, the recognition that something is different from what it should be is usually achieved more easily by direct observation than by looking at, say, a computer printout.

Perhaps the greatest defect of farm recording systems, where these are oriented

to planning or to control, has been the apparent failure of their designers to understand the nature of farmers' decision making processes. They seem to conceive of farmers being constantly confronted with one important decision after another – choices between alternatives, new opportunities to be accepted or rejected, and so on. We suspect that, for most farmers, the reality is very different. Management is more a matter of routine. Major changes in this routine are seldom contemplated and many of the changes that are made occur more by a process of steady adaptation rather than as one major organic choice.² Only major crises such as marked price changes or severe droughts are likely to prompt drastic action and, even then, the adjustment made may be less radical than seems often to be imagined. The truth is that if farmers (or anyone) constantly sought out all the decision alternatives open to them they would be faced with an overwhelming choice problem. Most avoid this problem by adopting a conservative policy of minimal change. Given this stance, records relating to planning and control may be of little or no value since the decisions these records are designed to facilitate are so seldom actually confronted. When they are confronted, less formal, less precise and perhaps highly intuitive 'information' may suffice nearly as well as the fancy records of the accountant or the computer.³

So far, our discussion of benefits has followed the conventional line based on supposed improvements in planning and control – but this may be a far too narrow view. There are doubtless other considerations that impinge on perceptions of the benefits of farm recording systems. We believe that some relevant features derive from non-pecuniary aspects of farmers' goals. Perhaps the most important relate to vanity and acquisitiveness. Some of the (few?) farmers who perform very successfully like to be told so explicitly – and how better than in a record-keeping system that includes comparative analysis. Conversely, who wants news if it's bad?

On the feature of acquisitiveness, some people seemingly manifest a collector's syndrome with respect to farm data.⁴ We suspect such tendencies are highly correlated with the proportion of fence posts painted white and with any propensity to nest field equipment in pristine rows. All these tendencies are the exception rather than the rule in the farming community – but may account for a large proportion of the ongoing users of farm recording systems.

In conclusion, we suggest that farm recording systems, at least in their present forms, are doomed to failure, not because of inadequate promotion but because the products do not meet the needs of the majority of farmers. For the development of more appropriate systems, much more attention must be devoted to studying the goals, decision making behaviour and attitudes of 'average' farmers, as distinct from the articulate few. We suspect that the outcome of such study would show either that nothing can be done or, more likely, that only a few simple changes, like better office procedures, are worth promoting. It is possible that the resources currently directed to the development and promulgation of farm recording systems and associated mini-computing equipment could be more productively employed otherwise, perhaps in developing more general agricultural and marketing systems to yield more useful data.

²Craig and Phillips (1980) found that 59 per cent of a sample of South Australian wheatgrowers admitted that they did no financial planning at all.

³See Anderson and Hardaker (1979) for some comments on the important role of intuition in farm planning.

⁴In our original piece we described this as 'a fetish for introspective bibliomania'.

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