Business Management Practices on Irish Dairy Farms–The Role Played by Extension

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Abstract

The reduction in agricultural profitability in the Republic of Ireland (ROI) has created a need for vigilant and ruthless monitoring of the financial performance of the farm business. Increased business risk and tighter margins mean that knowledge and skills in financial management, long-term planning, and effective monitoring are essential for all Irish farmers.

The Irish Extension Service, referred to as Teagasc, reorganized its advisory resources into two new services in 2001. One of these resources was the Technology and Business Service. Teagasc has a dedicated staff to help Irish farmers to improve their business management skills from which this study was initiated. This study employed triangulation procedures and revealed that Teagasc plays a significant role in providing Irish dairy farmers with professional farm production advice. However, the Irish dairy farmer still relies on the accountant and on annual tax accounts when dealing with financial management issues.

Keywords: Dairy, Financial Analysis, Financial Management, Tax Accounts, Decision-Making

Introduction

Agriculture in the Republic of Ireland (ROI) experienced a revolution since entry into the EEC in 1973. Major adjustments have occurred in the enterprise mix on farms and in the scale and efficiency of farms (Bogue, 2001). All boats were to be lifted by the rising tide of the Common Agricultural Policy (CAP) and although the CAP has been successful in raising the incomes of some farmers, the policy has failed for others (Phelan, 1994, p.106). This failure is evident in the dairy sector, which is the most profitable mainstream farm enterprise in the ROI. However, there continues to be a significant exodus out of the dairy sector (Kinsella, 1995). In addition, between 1990 and 1999, aggregate farm income in the ROI fell by an average of 0.9 % annually in real terms and most of this decline occurred between 1996 and 1999 (DAFRD, 2000, p.7).

The business environment for dairy farming is constantly changing, through local and international rationalization of milk processing and marketing and the introduction of new technology on farms. Margins for producing milk are being squeezed through competition from other milk producers and substitutes for milk products (Brosnan, 2001). These changes have brought into focus the need for farmers to improve their business management, as well as to continue best practices in production husbandry (McCarthy,
Increased business risk and tighter margins mean that knowledge and skills in financial management, long-term planning, and effective monitoring are essential for all Irish farmers (Parker, 2000).

Recognizing the changes that are taking place in Irish agriculture, the Irish Extension Service, referred to as ‘Teagasc’, reorganized its advisory resources into two new services in 2001; (1) the Technology and Business Service which was created for full-time and more commercial farmers and (2) the Rural Viability Service for the less intensive and smaller scale farmers, both part-time and full-time (Teagasc, 2001). The Technology and Business Service will continue to promote best technology but places business management center-stage (McCarthy, 2001). Over the past 12 months, Teagasc has expended considerable time and money in the development of new aids to business management. Yet, no research has been able to demonstrate that accounting will improve farm management and produce better farm performance (Poppe, 1991).

Purpose of the Paper

The extent to which Irish dairy farmers rely upon agricultural extension professionals for farm business management advice and support is examined in this study. The specific objectives were: (1) To identify if Irish farmers were using farm advisory reports (prepared by Teagasc or private agricultural consultants) to aid them in making farm financial management decisions for their farm business, (2) To determine the extent to which extension agents are used as a source of professional farm production and financial advice by Irish dairy farmers, (3) To identify the individuals involved in making farm production and financial management decisions for dairy farm businesses, (4) To examine the association between the hours per week Irish dairy farmers spend working on the financial management side of their farm business and their most useful source of professional farm financial advice.

Methods and Data Sources

A joint study between the Agribusiness, Extension and Rural Development Department, National University of Ireland and Teagasc, was undertaken in 2001. Two survey instruments were prepared.

Teagasc conducts the National Farm Survey (NFS) annually since 1966 to measure the levels of output, costs, and incomes and assess the economic performance of Irish farms across the spectrum of farming systems and types in operation in the ROI (Connolly et al., 2000). Eleven hundred Irish farmers were invited to participate in the first survey which was a short supplementary questionnaire attached to the Autumn 2000 NFS, to ascertain the degree to which Irish farmers were using ‘farm advisory reports’ prepared by Teagasc or private agricultural consultants to help them make farm financial management decisions for their farm business. In the autumn 2000 supplement of the NFS, data were collected from a nationally representative sample of 897 (79%) farms. The sample was a stratified random sample by farm system and size. The method of classifying farms into farming systems was based on EU farm typology (Connolly et al., 2000).

The second instrument consisted of an interview survey of 140 dairy farm proprietors who were members of the Teagasc-organized dairy discussion groups in the ROI. The interview questionnaire was prepared and pre-tested to insure the adequacy of the information sought, to estimate the duration of the interview and to highlight sensitive issues. The survey was carried out by telephone due the ‘Foot and Mouth’ restrictions that were in place in the ROI in the spring of 2001 as farm visits were prohibited by government regulations. The completed questionnaires were analyzed using the Statistical Package for Social Sciences (SPSS).

Results

NFS – Farm Advisory Reports

From the NFS it emerged that Irish dairy farmers (21%) were most likely to use farm advisory reports (prepared by Teagasc or private agricultural consultants) to aid them in making farm financial management decisions for their farm business. Parker (1999) and Nuthall (1996) observed similar results in research carried out in New Zealand. Twenty percent or less of tillage farmers and those farmers with a combination of ‘dairy and cattle’ enterprises were using these reports to make financial management decisions. Less than 10% of sheep, cattle fattening, and cattle rearing farmers were using farm advisory reports to aid them in...
making farm financial management decisions for their farm business. As dairy farmers were most probable to use farm advisory reports (prepared by Teagasc or private agricultural consultants) for this purpose, the research was focused on the intensive and technology-driven enterprise of dairy farming for stage two of the project.

**Dairy Farmer Survey**

Personal, Situational and Farm Characteristics

One hundred and forty dairy farm proprietors, who were members of Teagasc-organized dairy discussion groups, were invited to participate in the dairy farmer survey. Of the 121 usable responses (86%) in this study, 97% of the respondents were male, 84% were married, 82% were aged from 20–50 years, 69% were sole proprietors of their farm business and 95% were educated to secondary level. Over 11% of respondents had off-farm employment and almost half of their spouses were working off the farm. Over 70% of respondents had dependent children, but only 17% of them had identified a potential successor for the farm business. In 2001, the average area of land farmed was 81 hectares (ha), with a range in size form 24ha up to 272ha.

**Professional Farm Advice**

The sources from which Irish dairy farmers sought professional farm advice were examined (Table 1). In most cases the respondents identified at least two sources from which they sought this advice.

**Table 1**

<table>
<thead>
<tr>
<th>Sources of Advice</th>
<th>Farm Financial Advice</th>
<th>Farm Production Advice</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Source</td>
<td>Most Useful</td>
</tr>
<tr>
<td>Teagasc</td>
<td>46%</td>
<td>16%</td>
</tr>
<tr>
<td>Private Ag. Consultants</td>
<td>21%</td>
<td>11%</td>
</tr>
<tr>
<td>Accountants</td>
<td>93%</td>
<td>65%</td>
</tr>
<tr>
<td>Co-op/PLCs</td>
<td>-</td>
<td>n.a.</td>
</tr>
<tr>
<td>Agribusiness Suppliers</td>
<td>-</td>
<td>n.a.</td>
</tr>
<tr>
<td>Bank Employees</td>
<td>40%</td>
<td>6%</td>
</tr>
<tr>
<td>Other*</td>
<td>10%</td>
<td>2%</td>
</tr>
</tbody>
</table>

*Other: Discussion groups, media/literature.*

Although the provision of professional farm financial advice to Irish dairy farmers was not limited to Teagasc, nearly half of the respondents were seeking advice from this source. Private agricultural consultants and accountants also offer professional farm financial advice. Nearly all of the respondents sought financial advice from their accountant but this high figure might reflect the fact that it is mandatory for self-employed farmers to keep tax accounts in the ROI, for tax compliance purposes. Therefore, professional farm financial advice from accountants, may relate more to taxation requirements than farm management issues. The sources from which Irish dairy farmers sought professional farm production advice were also examined (Table 1). Nearly all of the respondents sought farm production advice from Teagasc. Private agricultural consultants, co-op/PLCs, and private agribusiness suppliers also offer professional farm production advice.

When asked to identify the most useful source of professional farm financial advice for managing the financial side of their farm business (Table 1), 65% of the respondents indicated accountants, 16% reported Teagasc and 11% cited private agricultural consultants. When asked to identify the most useful source of professional farm production advice for managing the production side of their farm business (Table 1), 74% reported Teagasc and 12% indicated private agricultural consultants.

**Farm Management Decisions**

Adopting a methodology as described by Kinsella (1995), the respondents, upon identifying the individuals that were involved in making production and financial management decisions for their farm business, were then
asked to rank (on a scale of 1-5 where 5 = most important person involved) these individuals in terms of their importance/contribution to making these decisions. In most cases the respondents only identified two or three individuals that they said were involved in making management decisions for their farm business. The ‘scores’ presented in Table 2, indicate the cumulative ratings by respondents for the respective individuals involved in decision making for their farm business and as such they reflect the contribution of that individual to making production and financial management decisions for their farm business.

Table 2

<table>
<thead>
<tr>
<th>Individuals</th>
<th>Production Decision</th>
<th>Financial Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>Farm Proprietor</td>
<td>601</td>
<td>603</td>
</tr>
<tr>
<td>Teagasc Advisor</td>
<td>152</td>
<td>134</td>
</tr>
<tr>
<td>Private Ag. Consultant</td>
<td>49</td>
<td>46</td>
</tr>
<tr>
<td>Accountant</td>
<td>8</td>
<td>169</td>
</tr>
</tbody>
</table>

From Table 2 it can be seen that the farm proprietor considered him/herself to be by far the most important person involved in making farm production and financial management decisions for their farm business. The Teagasc advisor was ranked second in terms of his/her contribution to making farm production decisions and ranked third in relation to making farm financial management decisions. The accountant played a significant role in relation to farm financial management decisions.

Dairy Farmer Survey - Financial Analysis Systems

Irish dairy farmers employ a variety of instruments for farm business assessment and analysis. Ninety-eight per cent of the respondents used their annual tax accounts to assess business performance. When drawing up annual tax accounts, the accountant derives a measure of assessable income. The rules for compliance are derived from the Finance Acts of the ROI (Saunders, 1991) and are guided by accounting standards, best practice, and the generally accepted accounting principles (GAAP). Despite the disclaimer warning users that the financial statements have been prepared for taxation purposes and therefore should not be relied on for any other purpose, nearly all-Irish dairy farmers used these financial statements as an indicator of past period profitability.

Assessable income as derived by Inland Revenue falls short of the economist’s view of income which was described by Hicks in 1946 as: *the maximum value which one can consume during a week, and still expect to be as well off at the end of the week as one was at the beginning.* Evidence from the Tui Milk Dairy Farmer of the Year 1992 competition in New Zealand indicated there was no significant correlation between a ranking by assessable income and one by ‘common farm surplus’ (Kirton et al., 1994).

In addition to their annual tax accounts, 60% of Irish dairy farmers were using DairyMIS (an in-depth national comparative dairy recording system operated by Teagasc), 55% were using commercial dairy management software packages, and 53% were using Dairy Profit Monitor (a program run by Teagasc to provide farmers with a detailed analysis of their financial performance) to analyze their farm business performance. Dairy Profit Monitor, DairyMIS, and commercial dairy management software packages are most likely to be used for cost analysis.

Time Allocated to Financial Management

The majority of Irish dairy farmers (65%) were spending three hours or less per week working on the financial management side of their farm business (Graph 1).
Seventy six per cent of the respondents who were spending less than one hour per week working on the financial management side of their farm business considered accountants to be the most useful source of professional farm financial advice. Only 4% of respondents in this category considered Teagasc as the most useful source. However, 25% of the respondents who were spending between four and five hours per week working on these aspects, considered Teagasc was the most useful source of professional farm financial advice. The more hours per week the respondent spent working at this endeavor, the less likely s/he was to consider accountants as the most useful source of this advice. The converse applied for Teagasc and private agricultural consultants, for those respondents spending less than five hours per week working on the financial management aspects of the farm business.

From an examination in the NFS of the main farming systems in operation in the ROI, it emerged that Irish dairy farmers were most likely to be using farm advisory reports (prepared by Teagasc or private agricultural consultants) to aid them in making farm financial management decisions for their farm business. Parker (1999) and Nuthall (1996) observed similar results in research carried out in New Zealand. The Dairy Farmer Survey (Table 1) shows that Teagasc is considered to be the most useful source of professional farm production advice by 75% of Irish dairy farmers and also has an important role in assisting Irish dairy farmers to make farm production decisions (Table 2). The accountant was identified as the most useful source of professional farm financial advice by 65% of Irish dairy farmers and also has an important input in assisting them in making farm financial management decisions. These results suggest that Teagasc offered services that were more production oriented in the past, perhaps being influenced by the common belief that high production levels are responsible for a healthy business. Deane (1993) points out that this view was supported by both a community and industry perception worldwide, that success in the dairy sector was dependent on the quantity of milk-solids produced per cow or per hectare. When interpreting the results reported here it must be remembered, that the impetus within Teagasc to focus and emphasize financial management practices only began in
2001. An important aspect of this study will be benchmarking and a replication of this study at points in the future.

Nearly all-Irish dairy farmers (98%) were using their annual tax accounts to assess business performance even though these accounts contain the disclaimer warning that they had been prepared for tax purposes and therefore should not be relied upon for any other function. Sabate and Enciso (1997) observed a similar result.

From the dairy farmer survey it emerged that the more hours per week spent working on the financial management aspects of their farm business (up to less than five hours per week) the more likely the producer was to consider Teagasc and private agricultural consultants as the most useful source of professional farm financial advice (Graph 1). Conversely, the less time farmers spend at this endeavor, the more likely they are to rely on the services of their accountant. Perhaps the ‘early adopters’ in the Irish dairy farm sector may already be implementing the new services and technology on offer by the Teagasc Technology and Business Service.

Every indicator points to an ongoing increase in competition in the markets for dairy based-products. Competence in business management has therefore become a dominant factor in achieving long-term financial viability and success for all European farmers. To allow European dairy farmers to become ‘better and different’, Extension Services such as Teagasc, must assist dairy farmers in building on their skill base in production management by adding capabilities in business planning and control.

**Educational Importance and Application**

The question of how farmers do, as opposed to how they should, manage their financial affairs receives surprisingly little coverage in the farm management literature. Yet it is critical in managing a successful profitable farm business. This study has shown that Teagasc advisors play a significant role in providing Irish dairy farmers with professional farm production advice but that they do not play as important a role in providing them with professional farm financial advice. Perhaps this focus on production stems from the fact that extension advisors are mostly agricultural science graduates who receive extensive education in production management issues.

Extension advisors in Teagasc may require further training in financial management issues to improve their farm business management skills to allow them deliver the new Teagasc Technology and Business Service.

**References**


