Defining Characteristics of Additional Farm Labour on Irish suckler beef farms

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Abstract

In very few occupations are the interdependence between the family and the business as strong as in farming. Almost all farm holdings in Ireland are family farms. Family labour is the dominant source of labour used on Irish farms. Thus, establishing the characteristics and motivation of the additional farm labour required on Irish suckler (cow-calf) farms, has significance in the use of farm labour. Data were collected from 115 predominantly spring calving suckler farms in Ireland with the objective of characterising the composition and use of farm labour and benefits received by the additional farm labour on Irish beef farms. It was found that farm spouses and farm children were the most common additional farm labour resource used, contributing an average of 10.5 and 7.5 hours per week to farm work respectively. Amongst the main challenges faced by respondents was the lack of interest in farming shown by respondents’ children due to unsociable long hours associated with farm work, low return on labour and the stress factor. Larger farms were most likely to hire-in labour and hired-in part-time labour was most common in the large farm category. Most respondents obtained their hired labour locally and a majority of respondents felt that current wage structures were adequate. A range of non-financial benefits were received by farm workers which included meals, accommodation and the use of machinery in certain instances.

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Introduction

Relative to many E.U. countries, Irish beef farms are small in size and family farm incomes are low (Department of Agriculture, Food and Rural Development, 2002). On larger units, income is often insufficient to pay competitive rates to hired labour. Almost all of farm holdings in Ireland are family farms (Department of Agriculture, Food & Rural Development, 2001).

Dawson (1984) defined family farms as farm households, "where in principle, the family has the opportunity to work on the land". Twomey (1978) noted that in no other occupation is the interdependence between the family and the business so strong as in farming. Almost all of farm holdings in Ireland are family farms (O'Hara, 1998; Department of Agriculture, Food & Rural Development, 2001). The majority of labour employed on Irish farms is family labour (Central Statistics Office (C.S.O) 2002); this is also the case for the U.K. (Britton and Hill, 1973; Gasson and Errington, 1993) and in most of the E.U. (Agriculture D.G., 2001).

In 1998, the C.S.O. in Ireland showed an average labour input per farm of 1.33 Annual Work Units† (A.W.U.) per year and 1.23 of these was accounted for by family labour, namely the farm holder, spouse and other family workers on the farm. Thus, family labour remains a permanent part of the agricultural production process (Jean, 1996).

Gasson and Errington (1993) and Errington and Gasson (1994) outlined that a distinctive feature of the farm family business is the use of family labour. At least some labour relationships are also family relationships (Coward and Smith, 1981). When the farmer seeks to match the supply of labour with the demands arising from agricultural production, the family workforce has a number of advantages and disadvantages compared with other types of labour force. The supply of family labour is likely to be much more flexible, more motivated and more committed to the business (Findeis and Swaminathan, 2002). On the other hand the pool of skills is limited, and the family cycle may lead to substantial fluctuations in the amount of labour available, resulting in periods of low labour productivity.

Gasson (1976) and Errington and Gasson (1994) stated that the farm family has traditionally provided a flexible and adaptable (Gasson, 1980) source of labour, particularly suited to meeting the peaks of labour demand in farming. The family may also be better placed to mobilise extra labour and to work unsociable hours at short notice in order to deal with time-critical operations or to cope with an emergency (Buchanan et al., 1982; Gasson and Errington, 1993). Rees (1971) in a study of Welsh agriculture, observed that the success of the family farm business depends a great deal upon the resourcefulness of the farm family and in particular the farmer’s spouse. However, as the farm household becomes more pluriactive (i.e. farm households engaged in off-farm activities) and farmers’ wives and other household members are now increasingly employed off-the-farm (Gasson, 1982; Sheridan, 1982; Gasson and Errington, 1993; Errington and Gasson, 1996; Lally, 1996; Commins et al., 1999; Department of Agriculture, Food and Rural Development, 1999; Department of Agriculture, Food and Rural Development, 2000; Kinsella et al. 2000; Hodge et al., 2001; National Farm Survey, 2001) this advantage is becoming increasingly eroded.

Another strength of the farm family business, as outlined by Gasson and Errington (1993) and Errington and Gasson (1994) is that family loyalty and commitment can produce a degree of self-exploitation necessary for survival. Abrahams (1991) noted on Finish farms that "families are by nature highly flexible work units and they can often respond successfully to difficulties and pressures by working harder and tightening their belts".

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† Annual Work Unit
Gasson (1974) and Errington and Gasson (1994) pointed out that the position of family workers in the short term can be markedly worse than that of hired workers entitled to a minimum wage. The children's low-paid labour may be taken as an advance payment for their inheritance (Gasson and Errington, 1993) assuming that they want to farm. Jean (1996) stated that the whole phenomenon of paying wages to family members is very odd, and wondered in some cases whether the wages are actually paid, or whether the payments exist only on paper so that farm workers can qualify for unemployment insurance benefits. However, Norris (1999) in Ireland made the case that paying wages to family members, if done correctly has benefits for the farm in terms of farm profit but that the farmer must register as an employer, register the family member as an employee for tax and Pay Related Social Insurance (P.R.S.I) purposes. Then depending on farm profits, there is a tax saving of between 31% and 53% on the wages paid.

Errington and Gasson (1994) noted that it was family ties that bind the family worker to the farm family business, and this may have assumed greater importance as the skill requirements of the agricultural workforce has increased. Greater reliance on family members who are locked into the farm business by a web of emotional ties reduces the danger of losing these significant investments in human capital. Gasson (1982) observed that the growing size and complexity of farm business has increased the need for accurate farm records and accounts, activities in which spouses are often involved, and goes on to underline the fact that more encouragement should be given to farmers' spouses to attend training courses in order to acquire farm skills.

An understanding of the family cycle is fundamental to an explanation of the farm family business. Gasson and Errington (1993) contended that this is especially true where labour productivity is concerned. The amount of labour available for farm work will diminish dramatically as the spouse becomes involved in child rearing (Fassinger and Schwarzweller, 1984) and it may later increase as the children grow up and they begin to contribute to work on the family farm. This suggestion is supported also by Kimhi (1996). The children take the load as they grow older especially the son who shows a desire to eventually take over the farm (Jean, 1996). But, employment of excessive amounts of family labour has been identified as the major constraint on average labour productivity in British agriculture (Britton and Hill, 1975; Errington, 1988).

The development cycle of the business cycle also gives rise to fluctuating demands for labour (Gasson and Errington, 1993, Errington and Gasson 1994). Labour productivity varies to reflect the availability of capital as well as the changing aspirations of family members. In Irish farm studies carried out by Symes (1972), the results showed that labour productivity was almost 50% higher in the expansion phase than at any other time in the business development cycle.

Jean (1996) reported a strong relationship between the type of farming and family labour and found that in livestock farming more use was made of family and especially female labour than in field crop farming, in which many workers were replaced by machines. Hastings (1987) came to the same conclusion, in a study carried out on farm wives in the U.K.

Errington and Gasson (1994) emphasised that the farmers' choice in acquiring labour might be constrained by the need to employ family members. This may lead to excessive labour use and consequently lower labour productivity (Castle et al., 1972) as well as the use of less skilled labour than would otherwise be hired. There is also a tendency to undervalue family labour (Castle et al., 1972).
Purpose and Objectives

The research objectives of this study were to: (1) Identify and quantify the additional sources of farm labour used on Irish beef suckler farms; (2) Examine the type of labour, both family and hired, used on beef suckler farms; and, (3) Identify incentives and benefits available to hired labour on beef suckler farms.

Methods/ Procedures and Data Sources

Data were collected from 115 predominantly spring calving suckler (cow-calf) farms distributed evenly across the east and west of the country. Data collection commenced in March 2002 and concluded in February 2003. Approximately 0.25 (30) of farmers were part-time, while the remaining 0.75 (85) farmed full-time. Each farmer was randomly assigned to 1 of 4 groups for data collection. Each group was allocated a week each month during which they recorded time spent undertaking predefined tasks on the farm using the timesheet method. All farm operators (farmers and hired/family part-time/full-time staff) were requested to record the starting and finishing time for each farm task they performed throughout the day over the three day recording (incl. weekends) duration each month over a total 12 month period. Task duration, length of working day and discretionary time were recorded.

A timesheet was completed by all farm labour, 3 days a month to include Saturdays, over the 12 month recording period, as recommended by Abeyasekera and Lawson-McDowall (2001) and varied slightly in layout and structure according to the season. The main reasons for recording on 3 consecutive days of the month were as follows (O'Donovan, 2001):

1. by recording for a number of days there was a much better chance of picking up regular and time consuming tasks and lowering the error;
2. farmers were more likely to get accustomed to the recording process; and
3. by recording on a monthly basis the seasonal variation in the terms of the tasks being carried out would be picked up.

Each individual farm worker completed a timesheet. Each individual timesheet incorporated a total of 27 farm tasks organised under 7 task category headings. The timesheet was accompanied by a full set of task definitions. Each farmer and farm worker was asked to read these definitions before completing the timesheet at the end of each survey day.

The task category heading "Feeding" incorporated the feeding of silage, and concentrates to suckler stock. The "Cleaning" task category described cleaning yards and houses, cleaning around the silage pit, and preparing the silage base. The task category "Animal Husbandry" was used to describe such tasks as calving and monitoring cows close to calving, stock checking, moving stock, weaning, castration, heat observation and artificial insemination, and veterinary tasks. "Farm Maintenance" incorporated tasks such as farm building and land maintenance, and farm machinery maintenance. "Grassland Management" was the task category used to describe tasks such as fertiliser and lime spreading, slurry and farmyard manure spreading, strip fencing, grass measurement, reseeding, topping, silage making and hay making. "Farm Management" described office tasks and stock trading (buying and selling animals etc.) tasks. Finally, the task category "Other Enterprises" was used to describe tasks associated with other (non-suckler) farm enterprises such as sheep farming, and cereal farming (tasks other than suckling).

Participating farmers completed a questionnaire focusing on management of additional farm labour. Uni-variate and bi-variate analysis was carried out on data using SPSS version 8.0.
Results

As farm size and enterprise number increased, so too did the need for additional farm labour. Farm spouses and farm children were the most common additional farm labour found on this sample of Irish suckler beef farms. Bigger farms were most likely to hire-in part-time additional farm labour.

A total of 84 study participants (73% of total) had children. Farm children in the older age groups contributed to work on the farm, as did children in younger age groups. The relationship between all labour hours worked on the farm per livestock unit per year devoted to the suckling enterprise and the age profile of children present in the farm household was examined, to establish whether or not the age profile of the children present in the farm household influenced the amount of time spent per livestock unit per year on the suckler enterprise.

Table 1: Relationship between all labour hours per Livestock Unit per year spent on the suckling enterprise and age profile of children on survey farms (n=84*).

<table>
<thead>
<tr>
<th>Labour hours per livestock unit per year on farm (suckling enterprise)</th>
<th>Proportion of young children on farm</th>
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<tbody>
<tr>
<td></td>
<td>Majority of children are 12 years old or less</td>
</tr>
<tr>
<td>Less than 27</td>
<td>19 (50%)</td>
</tr>
<tr>
<td>Between 27 and 40</td>
<td>13 (34%)</td>
</tr>
<tr>
<td>More than 40</td>
<td>6 (16%)</td>
</tr>
<tr>
<td>Total</td>
<td>38 (100%)</td>
</tr>
</tbody>
</table>

Chi-Square=12.120, df=2, Significance=0.002
*84 respondents have children

The results showed that 50% of the farmers with a majority of children 12 years old or less, spent 27 hours or less per livestock unit (LU) per year on the farm. This is compared to 26% of farmers the majority of whose children were over 12 years old and spent 27 hours or less per LU per year on the farm. Similarly 16% of farmers with a majority of children 12 years or less spent more than 40 hours per LU on the farm per year. This compares to 52% of farmers the majority of whose children were over 12 years of age and spent more than 40 hours per LU working on the farm per year.

This analysis suggests that farmers with younger children spent less time in the suckler enterprise than farmers with older children and the Chi-square statistic (Chi-square=12.120, significance=0.002), showed that this association was significant.

The majority of farmers with farm children in the older age groups (61%) indicated that their children had expressed an interest in farming. However, a minority of farm children had acquired agricultural training in this study. The main reasons why children had not expressed an interest in farming included the unsociable long hours associated with farm work (23%), low...
return on labour (27%), low return on investment (18%), and the stress factor (9%) made farming less attractive to children.

All 84 respondents who had children, were asked whether or not their children assisted with farm tasks and 79 farmers answered this question (94% response rate). The 5 respondents who did not answer the question had very young children (less than 4 years old). Fifty seven respondents (72%) said that their children did indeed assist with farm tasks on the farm and 22 of them (28%) received no assistance from the children. Therefore on a majority (72%) of farms, children assisted with the farm tasks. The average time worked at farm tasks by children was 7.5 hours per week (s.d. 8.318). This accounts for a whole extra day’s labour. The minimum and maximum amounts of time expended by farmers’ children each week was 0.25 hours and 35 hours per week respectively. Where the maximum amount of time was expended by the farmers’ children this was almost the equivalent of having a full-time worker at the farmer’s disposal.

Some children received "pocket money" as a reward each week for the assistance they gave with farm tasks. Other children were given "ownership" of farm animals, and received whatever monetary return was earned on these.

The vast majority of farmers in the study were married (77%) and had not identified a successor for the farm (85%). The average hours per week that the spouse devoted to farm-work activity was 10.62 hours (s.d. 8.462) and most of this time on the farm was taken up with office tasks, a task which the majority of farmers within the study rated as the most disliked activity. However many farmers stated that their spouse was an invaluable resource over the busy spring period. Where calving and lambing were in operation concurrently on many farms and with rotas in operation the physical hardship on one person was lessened when the work was shared. The minimum amount of time that any spouse worked on a respondent’s farm was 1 hour per week, while the maximum amount of time that a farmer’s spouse spent working on the farm was 40 hours per week. Again, the latter is the equivalent of having a full-time worker at the farmer’s disposal further underlining this valuable additional labour resource.

The number of farmers’ spouses with agricultural education was low. Of the 90 spouses within the study, only 8 of them received any form of agricultural education (8%). A majority (57%) of spouses that were involved in the study were employed off-the-farm. There were a range of occupations undertaken by spouses off-farm. The average hours worked per farm per week by the farmer’s spouse who was engaged in off-farm employment was 28 hours (s.d. 10.576).

Larger farms were most likely to hire-in part-time or full-time labour. Hired-in part-time labour occurred mainly on larger farms. The average hired full-time worker was employed for 46 hours per week on the suckler farm (s.d. 4.337), while the average part-time worker was employed for 13 hours per week (s.d. 9.601).

Most respondents sourced their requisite hired labour locally (83%), while a minority (4%) sourced their hired labour from outside the local area. Just 13% said that they used students on work-experience as a hired labour source. A majority (82%) of respondents said that to date they had no major problems sourcing hired labour.

Reliability, skills and familiarity with the farm were the most important factors influencing the effectiveness of hired labour-use.

The majority of farmers (52%) hiring labour felt that the current wage structure in place for hired farm labour was adequate. Approximately 22% of respondents employing hired labour felt that the current wage structure was too high, while 26% thought that the current wage structure was too low. The vast majority of farmers (96%) hiring labour believed that they were getting value-for-money from this labour source. Most farmers hiring labour (68%) provided
some form of benefit for their employees. The main non-financial benefits provided for employees included meals, protective clothing, independent showers and toilets, use of the telephone, accommodation and use of machinery. Although no farmers offered to finance additional certified training to workers, a couple of respondents were thinking of introducing the idea.

Discussion and Conclusions

An in-depth insight into the defining characteristics of additional farm labour was obtained. The importance of family labour to the average Irish suckler farmer was highlighted in this study and as farming becomes more and more a one-person operation, this family labour will have to be invested-in and rewarded, so that it will continue to remain a permanent and stable part of the agricultural production process (Jean, 1996). This supple, enthused and dedicated labour source is particularly suited to meeting the peaks of labour demands in suckler farming (Leahy et al., 2003). The results have shown that this source of labour is also better placed to work unsociable hours or cope with an emergency (Buchanan et al., 1982).

Indeed, the results suggest that it would not be unreasonable to suggest that the success of many of these farms depends to a great extent upon the resourcefulness of the farm family, and the farm spouse who carries out many of the tasks associated with office work. This finding is supported by Rees (1971). A majority of respondents stated that the task they disliked the most was office work although 20% of respondents felt that this task was by far the most important task on the farm. They indicated further that neglect of office work could have detrimental effects on maximising direct payments from the Government and European Union. The overwhelming dislike of office tasks by farmers, coupled with the low level of agricultural education that farm spouses had may have negative future impacts on the farm business. There is then a real need for increased targeted training at the farm spouse and/or at the entire farm family. A re-focussing of the schemes and services administered by Department of Agriculture, Food and Rural Development schemes towards the farm sector in the Republic of Ireland appears to be indicated. The study also showed, however, that the majority of farm spouses were employed off-the-farm, and this employment is predicted to increase further going forward, which may see some of the advantages stated above becoming eroded (Lally, 1996).

Fassinger and Schwarzweller (1984), observed that when the spouse was involved in child rearing less time was devoted to farm tasks. This appears to be supported in this study where stage in the family cycle may have had an impact on total time devoted to suckling. In that the labour hours per LU per annum was less on farms with younger children.

This study appears to support the assertion of Errington and Gasson (1994), that the position of family workers in the short-term can be markedly worse than that of hired workers entitled to a minimum wage.

In a study carried out in South Tipperary by Ruane and Phelan (2001) it was found that just 22% of survey respondents had identified a successor and that almost 50% of those who had not yet identified a successor were aged 36 to 50 years. In the study reported here, less than 15% of farmers had identified a successor and those who had identified one tended to be in the older age group. More alarmingly the vast majority of these farmers who had identified a successor did not know when the successors would commence ownership suggesting a possible lack of interest by intended farm recipients on entering farming. By the farmers failure to identify a successor early on, the childrens low paid labour which has been traditionally taken as an advance payment for their inheritance, is a potential loss in human capital on the farm.
Although employed to a lesser extent than family labour additional hired-in labour may become more important on beef suckler farms in Ireland if family labour becomes increasingly scarce. Thus personnel management becomes an increasingly important and complex aspect in the running of a farm business (Vroom 1964; Seabrook 1978; Billikopf 1999; Erven 2001a).

Traditionally farmers have paid substantial benefits in the form of housing and farm-produced food to employees (Castle et al. 1972) thus addressing the first basic need defined by Maslow (Erven, 2001b). Evidence of this was observed in the data, showing that a majority of the minority of farmers employing additional hired farm labour were providing their employees with incentives or “perks”. However, Billikopf (2001) suggested that while incentives are not the answer to all personnel challenges, they could do much to increase worker performance. Perhaps those farmers who were contemplating the introduction of educational opportunities to farm workers together with the traditional farm benefits, may improve motivation. An improvement in the opportunities available to farm workers and an increase in farm work performance may be a beneficial outcome.

Educational and Practical Importance

The research established the characteristics of additional farm labour on Irish suckler farms. The research results indicate that agricultural educators, especially agricultural advisers, trainers and extension workers need to be proactive on the impact of labour-use. This will be further emphasised in a future world that is changing and where part-time farming will increase with much reliance on additional labour. There are a variety of ways of educating farmers in effective labour-use including: profiling of the issue in newsletters and in the farming media; demonstration of practices and facilities at extension events, as well as the provision of training courses and discussion groups targeted at the entire farm family. Indeed, family labour and in particular the farm spouse should be encouraged to attend training courses to acquire farm skills. The use of detailed data such as that reported on in this study enables teachers and extension agents to appreciate further the necessary attention required to manage labour effectively in farm enterprises. Labour-use on farms should be introduced and highlighted in agricultural curricula programmes or in extension endeavours as a major component of any farm management course. Further research on the management of farm labour is also required. The importance of effective time-management is a core issue in these enterprises and must be emphasised to advisers, trainers and extension workers by labour specialists. The way in which the adviser or trainer perceives the role of effective time-management exerts great influence in the outcomes of farmers’ actions. There is strong evidence in Ireland already that extension workers believe that considerable gains in labour efficiency can be achieved at farm level (Bogue, 2003).
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* Teagasc is the National Body providing research, training and advice to the agri-food industry in Ireland.
† Annual Work Units (A.W.U.) are defined as 1,800 hours or more of labour input per person per annum (C.S.O. 2002).

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