Labour-use Efficiency Studies on Suckler Beef Farms– Some Continuing Specialist Roles for Extension

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Abstract
There has been an outflow of farm family labour into off-farm employment giving rise to labour shortages on Irish suckler beef farms. Over a 12 month period, data were collected from 115 predominantly spring-calving suckler beef (cow-calf) farms, average herd size 54 cows (range 21-195 cows). Seven principle tasks were identified. Task duration, length of working day and other discretionary time-uses were recorded. Tasks classified as Animal Husbandry and Feeding were the most labour demanding activities within the suckling enterprise. Farms had other enterprises that were labour-demanding at critical periods to the suckling enterprise. Seven principle task categories were identified. Task duration, length of working day and other discretionary time-uses were recorded. The results showed that the net average labour input was 9.9 hours per farm per day (h/f/d) (s.d. 3.41) with a labour peak and base labour input of 11.5 h/f/d (s.d. 4.30) and 8.3 (s.d. 3.56) h/f/d in March and December respectively. The net time spent working with the suckler herd was highest and lowest in July and January respectively. Farm buildings and facilities required modernisation. Farm fragmentation and herd management strategies were important factors impacting on labour input into the suckling enterprise. Large variation in net labour input in the suckler beef enterprise suggests farmers may be best assisted through individual case studies. Educators need to be fully aware of the labour demand placed upon farmers when strategies for expansion are being planned if the beef suckler industry is to continue to survive.

Keywords: Labour, suckler beef, time, infrastructure
Introduction

One of the most important components in achieving good farm economies of scale is the efficient use of farm labour (Edwards, 1984, Connolly, 2001). In recent years important structural changes have taken place in recent years within the European Union and in particular within the Republic of Ireland with regard to the agricultural workforce. There has been a persistent decline in the proportion of the total workforce engaged in agriculture (Connolly, 2001). Throughout the Republic of Ireland and the U.K., the farm labour outflow rates have been much greater for the full time workers than for the numbers of farmers themselves (Turner et al., 1995, O’Brien et al., 2001). The migration out of agricultural labour has been a European-wide phenomenon. Labour force outflows from agriculture measured 2.8% and 2.1% annually between 1995 and 2000, and 2000 and 2004 from the EU15 countries (E.U. 2006). In Ireland the corresponding labour outflows were 5.8% and 2.0% in the same periods (loc cit.). However, total employment increased in the Irish economy at more than double that rate in the same period (EU 2006)

Critical labour shortages were experienced on a range of farm enterprises on Irish livestock and tillage farms. Leahy et al. (2005) highlighted the contribution to farm operations played by farm families assisting the farmer in running the farm. The offspring supplied variable amounts of labour on Irish suckler beef (cow-calf) farms. The offspring contributed between 0.25 and 35 hours per week on these farms, averaging 7.5 hours per week or the equivalent of 1 day per week on 72% of respondent’s farms. Spousal contribution varied from 1 to 40 hours per week averaging 10.62 hours per week. Family labour provided flexible and adaptable sources labour and was particularly suited to meeting peaks of labour demands in farming (Gasson, 1980, Errington & Gasson 1994).

Demand for labour by farmers, therefore, has become a major issue, and if this shortage continues it will have a significant impact on the development of Irish farms in future (Teagasc, 2000, Connolly, 2001, Ruane et al., 2001). It is therefore desirable to encourage higher labour productivity on farms and make more effective use of the reduced available labour.

A knowledge requirement existed to provide more detailed and accurate information on labour-use, to establish the facts of how labour was assigned on suckler beef farms and to identify areas where labour-use effectiveness could be improved.

Purpose and Objectives

The research objectives of the study were to (1) measure the labour input on suckler farms over a 12 month period; and (2) to identify farm factors which have an influence on labour input, on beef suckler farms.

Methods/Procedures/Data sources

A 12-month labour study was undertaken on 115 suckler farms which were predominantly spring calving and were distributed evenly across the east and west of the country. Part-time respondents were 0.26 (n=30) while the remaining 0.74 (n=85) farmed full time. The population of farmers participating in the study had an average herd size of 54 cows while the national herd average is 18.3 cows (NFS, 2005). All participating farms were clients of the Irish Agricultural and Food Development Authority – Teagasc. Guidance from the European Productivity Agency, (1957) suggested that the best selections of farmers for time studies should be made through the advisory services. Such farmers were cited as operating in the best way they knew how and would be willing to try and improve. In addition, they were also likely to be more positive and
enthusiastic. These were important characteristics given the demands that would be made upon the participants for the duration of the study.

Data collection commenced in March 2002 and concluded in February 2003. Each farmer was randomly assigned to 1 of 4 groups for data collection. Each group was allocated a week in the month during which they recorded time to undertake predefined tasks. Starting and finishing time for each farm task was recorded over 3 consecutive (Thursday, Friday and Saturday) days. A pilot study using the developed timesheets was completed in early January 2002 and minor adjustments were made to the survey instruments with 20 pilot farmers.

Task categories
The timesheet was administered by the farmer on the individual farm. Each individual farm worker completed a timesheet for each day of the 3-day collection period. The timesheet questions were established to capture the requisite data to meet all the requirements of the study. The layout of the timesheets was user-friendly to facilitate the participating farmers in the study. The timesheet incorporated a total of 27 farm tasks organised under 7 categories. Task duration, length of the working day, as well as discretionary time expenditure during each assessment-day was measured.

The task category heading "Feeding" incorporated the feeding of forage, mainly silage, and concentrates to the cattle herd. The "Cleaning" task category described the cleaning of yards and houses, cleaning the silage pit areas, and preparing the silage base and troughs for further feeding. The task category "Animal Husbandry" described a wide range of tasks such as calving and monitoring cows close to calving, stock checking, moving stock, heat observation, 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 activities 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 administration and trading (buying and selling etc.) tasks. Finally, the task category "Other Farm Enterprises" was the term used to describe tasks associated with other (non suckler) farm enterprises e.g. sheep farming, cereal farming etc. (i.e. enterprises other than suckler beef farming). The participating farmers completed an accompanying questionnaires focusing on farm facilities, farm layout and farm practices. These questionnaires consisted of predominantly closed questions with a minority of open questions. Questionnaires were designed to address pertinent topics relevant to the farming year. Univariate and bi-variate analyses were carried out on data using SPSS version 8.0.

Results
One hundred and fifteen farmers participated in the study. No farmers exited the study during the 12-month study period. Fulltime operators numbered 85 of the respondents and 30 reported that they farmed part-time. The timesheet results are illustrated in Figure 1.

Measuring labour input
The average total bovine and cow herd size was 93 and 54 livestock units respectively. Net labour input peaked at 11.45 hours per farm per day (h/f/d) in March (s.d. 4.30) and was lowest in December at 8.32 h/f/d (s.d. 3.58). Average labour input over the 12 month period was 9.90 h/f/d (s.d. 3.41). The data excluded all meal times and any other breaks taken in the course of the day and therefore represents net times spent working at the different farm tasks tasks.
Over the 12 month period, the average distribution of net labour input on suckler beef farms per day was attributed to: Feeding, 1.13 h (11%), Cleaning, 0.78 h (8%), Animal Husbandry, 2.58 h (27%), Farm Maintenance, 1.41 h (14%), Grassland Management, 1.51 h, (15%), Office Administration, 0.82 h (8%), and Other Farm Enterprises, i.e. non-suckling enterprises was 1.68 h which represented 17% of the time. The trends in the data set suggested however, that smaller farms with Other Farm Enterprises used relatively more time on the other enterprises than larger farms with comparable other farm enterprises. Figure 1 provides an outline of the total labour input (hours per farm) for the 115 farms from March 2002 to February 2003 inclusive. While labour input associated with many of these individual tasks did not, in themselves, constitute a high demand on total net labour, they created seasonal labour peaks of high demand. Most tasks, however, required less than 15% of total net labour input in this research.

In the case of Feeding, the time input for forage and concentrate provision increased from November through March from 1.28 (s.d. 1.04), 2.17 (s.d. 1.28), 2.19 (s.d. 1.18), 2.26 (s.d. 1.35), and 2.24 (s.d. 1.02) h/f/d while the stock remained indoors or in yards. When animals went to grass, the time allocated to the feeding of stock was reduced in April to 1.45 (s.d. 1.14) h/f/d and declined further to 0.23 h/f/d by July. When concentrate supplementary feeding commenced at grass for the suckler calves in August, the feeding task-time was 0.26 (s.d. 0.53) h/f/d but this increased throughout the autumn period as grass became scarcer. The average time taken for this task in November was 2.02 (s.d. 0.87) h/f/d.

The chore of cleaning the silage feeding areas, animal housing and yard areas was a core activity throughout the year, but especially in the winter housing period. The times taken in the winter months between December and April inclusive were 0.94 (s.d. 0.739); 1.16 (s.d. 0.87); 1.05 (s.d. 0.94); 0.92 (s.d. 0.81) and 1.01 (s.d. 1.05) h/f/d. With turnout to pasture the time input into cleaning actions declined initially only to increase again in June as silage pits were prepared for receiving silage for conservation at 0.93 (s.d. 0.93) h/f/d. For August and September cleaning tasks were at a minimum at 0.30 (s.d. 0.57) and 0.29 (s.d. 0.91) h/f/d. By October and November labour input times increased to 0.48 (s.d. 0.93) and 0.82h (s.d. 0.93) as stock were housed for the winter. Cleaning averaged at 0.78 (s.d. 0.46) h/f/d over the 12 month period of the study.

Animal Husbandry tasks were the tasks that demanded the most time throughout the year. This was highest in March, April and May at 3.32 (s.d. 2.09), 3.52 (s.d. 2.71) and 3.32 (s.d. 1.95) h/f/d respectively over the 3-spring months at an average of 3.37 h/f/d. Animal husbandry tasks reached a peak in April as the calving season progressed and calf numbers increased on the farm. Animal husbandry tasks increased again in September (2.66 s.d. 1.73) and October (2.84 s.d. 1.69) h/f/d as some autumn calving and weaning began. Time devoted to animal husbandry tasks averaged 2.58 (s.d.1.20) h/f/d over the 12 month recording period.
Figure 1. Total labour input (hours per farm per day) for the 115 suckler beef farms over March 2002 to February 2003.

The seasonal distribution of Animal Husbandry is examined for the 115 farms (Table 1). Checking and moving stock was consistent for the four seasons. Calving and monitoring cows were also demanding of time in spring and summer and a number of farms had cows calving in the autumn. Veterinary requirements in winter was slightly higher (proportionally) in terms of labour input than in spring, summer and autumn. The total hours committed to Animal Husbandry tasks were the highest in spring at 3.41 h/f/d. They were also a high labour commitment throughout the year to animal husbandry.
Commitment to Farm Maintenance tasks was lowest in the winter months (December, January and February), but it increased in March (0.98, s.d. 1.36), April (1.48 s.d. 1.62) and May (2.16 s.d. 2.11) h/f/d respectively as the grazing season progressed. The time commitment remained high in June, July and August as land, buildings and machinery improvements were made. Time associated with farm maintenance averaged 1.41 h/f per year (s.d. 0.92) over the recording year.

Grassland Management labour input times increased, values May, June and July were 1.25 h/f/d, (s.d.1.36) 2.61 h/f/d, (s.d. 3.97) and 4.63 (s.d. 4.46) h/f/d. respectively, throughout the grass growing season. The majority of time was taken up by silage making, topping and slurry spreading tasks. Grassland management remained high in August (2.54, s.d. 2.40) and September (2.05, s.d. 3.21) in h/f/d before decreasing as stock were housed or yarded. Grassland management activities averaged 1.51 (0.92) h/f/d over the 12 month recording period.

Farm Management tasks averaged 0.82 (s.d. 0.817) h/f/d over the recording year. From low labour input in January and February (less than 0.62 h/f/d), with an increased input through March, April and May (0.75, s.d. 0.78; 0.82, s.d. 1.19; and 1.02, s.d. 1.32 h/f/d respectively) as compliance with EU regulatory requirements, calf registrations and farm accounting requirements were indicated. The time commitment to farm management tasks declined slightly in June, July and August as most labour input time was devoted to outside work.

Increasingly, additional time was required in farm management tasks in September, October and November (0.95, s.d. 1.40; 1.40, s.d. 1.71 and 1.22 s.d. 1.82 h/f/d respectively) as farmers traded stock in the latter months of the year.

Other Farm Enterprises averaged 1.68 h/f (s.d. 1.81) per year over the 12-month recording period. Peak times were in January, February and March in particular with lambing and preparation for sowing cereals. The recorded labour input times were 1.57 (s.d. 2.20), 2.25 (s.d. 3.41) and 2.66 (s.d. 4.08) h/f/d for the three months respectively. Times for these same enterprises were 1.85, s.d. 3.37, 1.49, s.d. 2.26, 1.40, s.d. 2.07, 1.31, s.d. 2.06 for April, May, June and July respectively in h/f/d. August and September demands were also high at 1.73 (s.d. 3.15) and 2.22 (s.d. 4.10) in h/f/d respectively as crops were harvested. However the labour input demand for these tasks decreased throughout the remaining months of the year.

Table 2 provides a summary of the hours spent per farm per day on the tasks throughout the period of data collection. The differences between the minimum and maximum values

<table>
<thead>
<tr>
<th>Tasks</th>
<th>Winter</th>
<th>Spring</th>
<th>Summer</th>
<th>Autumn</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calving and Monitoring cows</td>
<td>31%</td>
<td>32%</td>
<td>8%</td>
<td>23%</td>
</tr>
<tr>
<td>Checking and moving stock</td>
<td>43%</td>
<td>46%</td>
<td>65%</td>
<td>62%</td>
</tr>
<tr>
<td>Heat checking and AI</td>
<td>4%</td>
<td>11%</td>
<td>15%</td>
<td>1%</td>
</tr>
<tr>
<td>Veterinary</td>
<td>19%</td>
<td>11%</td>
<td>12%</td>
<td>12%</td>
</tr>
<tr>
<td>Weaning and castration</td>
<td>3%</td>
<td></td>
<td>12%</td>
<td>17%</td>
</tr>
<tr>
<td>Mean (hours/farm/day)</td>
<td>1.91</td>
<td>3.41</td>
<td>2.66</td>
<td>2.95</td>
</tr>
<tr>
<td>Standard Deviation</td>
<td>0.206</td>
<td>0.113</td>
<td>0.244</td>
<td>0.108</td>
</tr>
<tr>
<td>Season</td>
<td>Dec-Feb</td>
<td>Mar-May</td>
<td>June-July</td>
<td>Sept-Nov</td>
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Table 1

Seasonal Distribution for Defined Animal Husbandry Tasks (per farm per day) Expended on 115 Farms over the 12 month period

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depends upon the multiplicity of factors that impact each individual farm including farm fragmentation, farm layout, the management policies operating on the farms, levels of mechanisation and use of contractors. However, depending upon the individual farm task category and chores carried out within each category, the differences between maximum and minimum times taken for tasks varied 10.5 fold for Grassland to 1.78 fold for Other Enterprises. Feeding task-time differences between minimum and maximum times were factors of 4 and 3.3 those for farm maintenance. The differences for the remainder of the task categories also had considerable variation.

Table 2

<table>
<thead>
<tr>
<th>Task</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Average (mean)</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feeding</td>
<td>0.23</td>
<td>2.26</td>
<td>1.13</td>
<td>0.59</td>
</tr>
<tr>
<td>Cleaning</td>
<td>0.29</td>
<td>1.16</td>
<td>0.78</td>
<td>0.46</td>
</tr>
<tr>
<td>Animal husbandry</td>
<td>1.65</td>
<td>3.52</td>
<td>2.58</td>
<td>1.20</td>
</tr>
<tr>
<td>Farm maintenance</td>
<td>0.65</td>
<td>2.16</td>
<td>1.41</td>
<td>0.92</td>
</tr>
<tr>
<td>Grassland management</td>
<td>0.44</td>
<td>4.63</td>
<td>1.51</td>
<td>0.92</td>
</tr>
<tr>
<td>Farm management</td>
<td>0.46</td>
<td>0.82</td>
<td>0.82</td>
<td>0.73</td>
</tr>
<tr>
<td>Other enterprises</td>
<td>1.03</td>
<td>2.66</td>
<td>1.68</td>
<td>1.82</td>
</tr>
</tbody>
</table>

Farm factors influencing labour input on the suckler farm

There are many factors that impact upon labour input over the course of the farming year. Those examined in this paper were the impact of farmland and farmyard fragmentation on labour input into farm tasks and the effect of farm facilities on labour efficiency.

Farmland fragmentation

The results of the study showed that only 17% of respondents reported that all of their land was in the same parcel while 83% of farmers indicated that their land was in a range of parcels. Twenty five percent of farmers had 2 parcels of lands, and 50% had between 3 and 4 parcels of land. Other respondents had land in more than 4 parcels. Chi-square analysis showed that the more fragmented the holding, the longer was the working day (Chi-square=16.713, significance 0.01). The average distance from the furthest fragment of land to the farm house was 8 km (s.d. 11.72).

Fifty per cent of respondents had parcels of farmland 5 km or less away from the farmer’s residence. Where herds were fragmented during the grazing season, almost 60% of respondents divided their suckler beef herds into groups at grazing in the summer months, while almost 40% kept their animals in one group in the same time period. Of those that divided their herds, the average farmer divided the herd over 3 parcels of land. The results showed that the more fragmented the suckler beef herds, the longer was the time expended by the farmer on the suckler beef enterprise (Chi-square=8.815, significance = 0.012). Herd fragmentation also had a significant association with the length of time devoted to the suckler beef enterprise, in June (P<0.05). Over the winter period (November, December, January), the more feed areas that there were on the farm, the longer was the length of the farming day devoted to suckling tasks (P<0.01).
Farm facilities
Just over 70% of the respondents said that their farm buildings or farm facilities could be improved to reduce labour requirements. Farmers who felt that their farm buildings and farm facilities could be improved to reduce labour requirements tended to have a longer working day (P<0.05). The same was true of farmers who said that their farm buildings were in need of modernisation (P<0.055). With farm buildings, the respondents indicated that a common problem was that their farm buildings were not “cleaning friendly”. Many had straw-bedded buildings that were labour intensive in the winter and spring periods. In other cases farmers had inadequate facilities in the form of unsuitable buildings for the scale of the enterprises on the farm (19% of respondents). A further problem cited was that calving facilities and cow housing facilities were too far-distant from the farm residence, that calving facilities required improvement. In addition, investment was required in improving ventilation systems, increasing animal manure storage facilities, installation of automatic scrapers and other remedial works.

Almost 87% of the respondents stated that their housing unit had calving facilities, and just over 72% said that their housing facilities had a calf creep area. A building that has access to calving facilities and a calf creep area assists in a reduction labour input during the suckling period (Teagasc, 2002).

Over 53% of the respondents had internal roadways running through the farm, while 93% of them stated that they had good fencing in place on the farm. This is assistive in maximising labour efficiency when moving stock around the farm. Just over 88% of respondents indicated that they had good cattle handling unit on the farm, a good handling unit reduced labour input demand when treating or veterinary-testing the farm livestock.

Discussion
There are relatively few studies in recent years of the actual times deployed by farmers on farm tasks in any farm enterprise. O’Shea et al. (1988) in the Republic of Ireland carried out the initial research work on labour demand on 30 dairy farms. O’Brien et al. (2004) reported a larger cognate study on labour input and other performance factors on the Irish dairy farms. Leahy et al. (2004) reported case studies on beef suckler farms as a further part of this research. Nix (2006) continues to publish annually the labour-use estimates for farm enterprises. This study was focused upon the labour input in the beef suckler sector, as an enterprise of major importance to the Irish Agricultural economy with 1,285 million beef cows and in-calf breeding stock recorded in 2003 (CSO, 2004).

The data showed the seasonal nature of the tasks on suckler beef farms. However, the care of the animals in the Animal Husbandry tasks was the most demanding series of tasks in terms of time-use at 27% of the time expended on the labour input. There was also a strong seasonal dimension with the greatest demand in spring followed by summer and autumn.

For the suckler beef enterprise the Feeding task accounted for a 11% of total expended time. Both of these tasks were demanding of labour input but in different ways. Attention to animals, both individually and as a herd, is required throughout the entire year. The intensity of the labour input in March, April and May for calving and again in September and October for weaning and for some autumn calving corresponded with simultaneous high labour demands for other non-suckling enterprises due to seasonality factors. Therefore a high level of management with access to additional skilled labour is indicated to enable farmers to manage these particular peak labour demands.
Standard deviations of the labour input were also variable suggesting that farm layout and other factors such as the level of farm mechanisation together with feeding practices may require improvement. Farmyard layout may also be very important as well as herd management strategies especially in the summer months. The total labour input on the farm peaked in the spring-time, at 11.45, 11.08 and 10.54 h/d in March, April, and May, respectively. Animal husbandry emerged as the most time-consuming task over the spring period, at 3.32, 3.52, and 3.32 h/d in March, April, and May, respectively.

A large majority of respondents (70%) recognised that improvement in farm facilities was required suggesting that further capital investment was required to reduce labour input. However, incomes from the cattle rearing sector have continued to be low (NFS, 2004) in recent years. The NFS (2004) noted that market-based gross output improved marginally in that period (2%), and that direct costs also declined by 2 per cent in the same period. However, overhead costs also increased by 5 per cent. Eligible suckler beef farmers continue to receive income support under the EU Single Farm Payment (SFP) subject to cross compliance requirements. However, Phelan (2005) observed that the current visibility of direct payment systems (now replaced by the SFP), when taken with EU enlargement with countries that have major agricultural sectors e.g. Romania and Bulgaria among the current accession countries (in 2007), there will be, downward pressure on the SFP supporting farmers’ incomes over time. Farm Family Income (FFI), including the SFP equivalent to direct payments in 2004 for cattle systems was just 25 to 30% of the average industrial wage in Ireland (NFS, 2004). Therefore capital investment by farmers on farm improvements in order to reduce labour demands is difficult to envisage in the present economic climate without supporting grant-aid from elsewhere.

The study shows clearly that the net-time labour commitment on suckler beef farms was large and demanding, with a net labour peak of 11.45 h/f/d in March with the lowest time commitment in December at 8.32 h/f/d. When the most demanding task was examined, Animal Husbandry, there was a large seasonal dimension. However, when the standard deviations are examined for these averages and other task times, it is apparent that there was considerable variation around labour input for tasks. The data also showed that there was a large variation in most of the tasks measured on labour usage suggesting variation levels in the task time taken between 30% and in excess of 100% in certain cases. With the high seasonal demand for labour in Animal Husbandry tasks, it is clear that the individual layout of farm, land fragmentation level and the farm facilities and herd management policies offer further scope for research towards improved labour-use efficiency. This must be taken into account with the changing pattern of labour resources (hired and/or family) on suckler beef farms.

Conclusions and Implications
This research established the task times taken for a range of tasks for a suckler beef enterprise. The labour commitment on single-operator farms or on part-time farms may be unsustainable as migration from farming to other employment opportunities continues in an economy that continues to grow. As the beef prices remain relatively static and farm overhead costs increase, viability of Irish beef suckler farms will be in doubt should SFP supports come under downward pressure in the years ahead. In addition, the physical work commitment on beef suckler farms as reported in this research is unsustainable as more labour migrates from the farming sector or unless further investment and farmland restructuring occurs. More farmers are likely to become part-time operators and reduce their level of enterprise intensity in the suckler beef sector as the...
SFP has been decoupled from production. This has implications for the national suckler beef herd and the indigenous beef industry.

Therefore unless other income sources are found to sustain farm families in this sector through pluriactivity or multifunctional agriculture a decline will probably be experienced in the suckler beef sector. However, the net labour requirements to sustain a suckler beef enterprise on Irish farms are untenable unless the income from suckler beef enterprises increases. Further investment in farm facilities and restructuring of farmland parcels is required together with other sources of hired farm labour to meet the deficits in labour supply.

**Educational Importance and Application**

The research established the labour input requirements on Irish suckler beef farms and some of the factors contributing an increasing labour requirement. Farm labour management requires significantly more attention in agricultural extension and curricula programmes if a sustainable beef industry linked to family farms is to continue. The statistical analysis showed that there were large standard deviations recorded on these farms demonstrating a prescriptive requirement of individual farms for expertise towards decreasing the on-farm labour requirements in an environment of declining labour availability. The high standard deviations suggest that case studies may be a valuable tool in providing practical learning experiences and opportunities for students and extension faculty in the provision of expert assessment and advice. These research results indicate that agricultural educators, especially agricultural advisers, labour specialists, trainers and extension workers also need to be better informed on the management of farm labour if farm-use of this resource is to effective and efficient. This will be further emphasised in a changing world which sees an increase in part-time farming, and increased reliance on additional paid labour on the farm. It is essential that the farmer controls the labour input into the suckler beef herd rather than the farm enterprise controlling the labour input.

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