

People first: Sustainable workloads to create an attractive and competitive career

Paidi Kelly, Marion Beecher and Pdraig French

Teagasc, Animal & Grassland Research and Innovation Centre, Moorepark, Fermoy, Co. Cork

Summary

- Almost half (47%) of all Irish cows are now milked in herds greater than 100 cows.
- Recruitment and retention of well trained and skilled farm operatives and managers will be the limiting factor for expansion for many farmers in the future.
- Dairy farming must be considered an attractive career option, provide competitive returns per hour worked, adequate time-off and a sustainable workload for everybody working on the farm.
- To provide adequate remuneration to all those working on farms, farmers will need to focus on increasing the profit achieved per unit of labour input to the farm.
- People management skills will be an essential requirement of successful large farm owners/managers.
- Planning and preparation for compact spring calving is essential to minimise the stress associated with the peak workload.

Introduction

Irish dairy farmers have expanded rapidly over the last six years. Since 2010, there are over 300,000 extra cows being milked on Irish dairy farms, and 47% of all the cows in Ireland are now milked in herds of >100 cows. These extra cows have increased the overall workload on farms and especially increased the spring workload as six week calving rate has improved nationally. If not properly managed, this increased workload can create acute stress on family farms. For 30 years Irish farmers were limited by quotas, and many perceived that land would be the most limiting factor post-quota. Following the expansion that has already happened, however, many farmers now feel that the labour required for greater cow numbers is not readily available and will require alternative solutions.

Competitiveness of Irish dairying

Much is talked about the competitiveness of low-cost grass based Irish dairying relative to our competitors, which allows us to achieve viable prices on the global market. As unemployment rates decline in the Irish economy, however, the dairy industry will have to compete with all other sectors for young people to enter the industry. Teagasc estimates that between now and 2025, over 6,000 people will be needed to enter Irish dairying as either successors or employees (Table 1). The number of young people that choose dairy farming as a career will be influenced by their perception of the dairy industry. To attract these people to the industry, dairy farming must be an enjoyable and rewarding career that offers a good work/ life balance comparable with other careers.

On top of the need to attract extra people is the need to ensure the workload of every existing person in dairy farming (owners, family members and employees) is sustainable. This is a challenge given the recent pace of expansion. Hence, dairy farming requires a new focus on what farms are like as places to work, what farmers are like as people to work for, and what a career in dairy farming has to offer. This paper will focus predominantly on maintaining a sustainable workload and being an employer of choice.

Table 1. Projected increase in labour requirement on dairy farms to facilitate dairy expansion to 2025

Year	Cows (in herds >30 cows)	Farms	Cows/ farm	hrs/cow	New FTEs	Replacement FTEs	Total
2013*	1,090,440	14,490	75	42.1		414	414
2014*	1,142,781	14,793	77	41.8	483	423	906
2015*	1,230,775	15,096	82	41.0	904	431	1,336
2016*	1,338,461	15,339	87	40.0	1,144	438	1,582
2017**	1,365,230	15,352	89	39.6	226	439	665
2018**	1,392,535	15,364	91	39.2	220	439	659
2019**	1,420,386	15,376	92	39.0	347	439	786
2020**	1,448,793	15,386	94	38.6	228	440	668
2021**	1,477,769	15,396	96	38.3	296	440	736
2022**	1,507,324	15,406	98	37.9	231	440	671
2023**	1,537,471	15,414	100	37.6	301	440	741
2024**	1,568,220	15,420	102	37.2	233	441	674
2025**	1,599,585	15,426	104	36.8	233	441	674
Total 2013 to 2016					2,531	1,706	4,238
Total 2017 to 2025					2,315	3,958	6,273

* June cow numbers in herds >30 cows from the CSO for 2013 and 2016, estimate for 2014 and 2015;

** Projected forward at +2% per year

Why is a sustainable workload important?

- When adequately rested, everyone enjoys farming more and are more likely to make good management decisions that will improve farm performance and profit.
- The farmer has adequate time on a weekly basis allocated to making key management decisions (e.g., to measure grass and decide on any actions required).
- To ensure a person can spend quality time with family, friends and at their other interests outside of farming.
- There are health and safety and well-being risks when working too hard. Farming currently has the very undesirable title of being Ireland's most dangerous profession.
- There is likely to be significant competition between farmers for full and part time employees in the future. Those who provide attractive work packages will be more successful at attracting and retaining good people.

What is a sustainable workload?

- Planned start and finish times for each day that are achieved most days.
- Nobody is working more than 50 hours per week on average.
- Work is organised and planned in advance and carried out with minimal stress for the farmer and animals.
- Administrative work like registering calves is completed during the day, not at night time after a full day's work when tired and more likely to make mistakes.

- The spring workload will be busy but manageable. Being prepared for the spring by planning and allowing for something that may go wrong (e.g., calf scour) so the farm team can still cope with the extra work.
- At least some rest time during calving (e.g. getting help with the milking for a day a week) and ideally every second weekend off outside of the calving and breeding season.
- Good retention of full and part time employees indicates that people enjoy working for you and working on the farm.
- Adequate time for professional development (i.e., discussion groups, open days, training courses, etc.).

How to achieve a sustainable workload

If some of the targets outlined above are not being achieved, then consider making changes to reduce workload.

There are a variety of options to consider that will reduce the workload on any given farm. These can be broken into the following categories:

Changing work practices

Making changes to how work is done on the farm can save large amounts of time without any reduction in farm performance, and often with very little cost. Work practices that have been done routinely for years may no longer be suitable on a farm given the increased workload with extra cows. Examples of changes which can save time include:

- Once a day calf feeding from three weeks of age.
- Vaccine use in cows/ calves to reduce animal health issues e.g. for scour or pneumonia.
- Night time feeding of dry cows during late pregnancy to increase the number calving during the day.
- Grazing cows in 36 hour blocks to avoid needing strip wires during the main grazing season.

Making the farm set-up more labour efficient

Facilities have a major influence on labour efficiency and should be considered during any aspect of farm development. As milking is the task that takes up most time during the year, the milking parlour set-up has a large influence on farm labour efficiency. Cow flow into and out of the parlour and the number of rows to be milked are key considerations. Calf rearing facilities tend to be the least modern on many farms, and increases the workload during the busiest time of the year. Having tractor access to clean out pens, not having to carry milk long distances and being able to rear calves in batches of 10+ are all essential on a modern dairy farm.

Out-sourcing work

Many of the most labour efficient farmers reduce the hours of work by out-sourcing work. On larger scale farms this can mean all machinery work being done by contractors (fertilizer, slurry, silage, winter feeding etc.) and on smaller scale farms this might involve using contractors at particularly busy times of the year (e.g. slurry and fertilizer spreading in spring). Many farmers rule out this option due to the cost of the service but fail to consider the huge potential gains e.g. your time as the manager of your business is extremely valuable, especially in the first half of the year during calving and breeding. Ensuring the job gets done on time is another important benefit e.g. a delay in getting fertilizer out in spring can be a huge cost in terms of lost grass growth. Savings on machinery running costs are another big positive; some farms using all contractors for machinery work have a lower contracting bill than the combined contracting and machinery running bills of farms with their own machinery.

There are also many other options to out-source work. An increasing number of farmers are now getting calves contract reared from two weeks of age to further reduce the workload during the spring. Contractors can be used for almost any job on the farm from fencing to power hosing sheds etc.

Hiring full or part time help

As dairy farms continue to increase in scale there will be a greater requirement for part time and full time help. While the workload on many farms was manageable for one person up to the recent post-quota expansion, increased scale and the seasonality of the workload means that extra help is needed. The key change when you become an employer is that your farm is now a place of work for another person. This is where the farm set-up health and safety becomes more important: the easier that jobs are to do, the better they are likely to be done.

How many cows can one person sustainably manage?

When discussing labour efficiency, a question is often asked: how many cows can one person manage? The first point to make is there should be no such thing as a one person farm. Every person needs a break from work and so every dairy farm business should have people available to offer the farmer time away from the farm, regardless of scale. This may be family members or paid relief help.

Cows per person is influenced by two things:

- How many hours of work does each cow require during the year?
- How many hours is the person willing to work?

Using data from previous Teagasc labour research, this relationship is illustrated in Figure 1. Based on the national average herd size (75 cows in 2016), average labour efficiency nationally is estimated to be 40 hours per cow per year. This includes the workload associated with rearing replacement heifers for the farm.

Farms operating very labour efficient systems (e.g. those with labour efficient set-ups, contract rearing heifers and contracting out machinery work etc.) are achieving efficiency levels of <20 hours per cow per year. As can be seen from Figure 1, this difference in labour efficiency could potentially allow one person manage another 60 cows.

The other key variable is how many hours is a person willing to work? Achieving high levels of labour efficiency by simply working longer hours is unsustainable. The farm will look impressive using the key performance indicator of cows per person, but chances are that profit is not being maximised as people are too busy working and management decisions suffer. Combining current national average levels of labour efficiency with maintaining a reasonable working week of 50 hours per week over 48 weeks would mean that one person can effectively manage 60 cows. While this analysis looks at annual labour efficiency, another key consideration is the workload at different times of the year, especially in the spring.

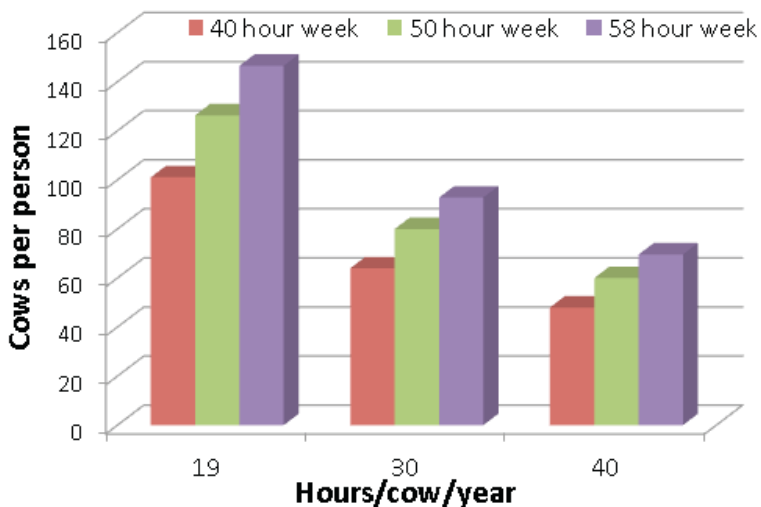


Figure 1. The effect of labour efficiency (hours/cow/year) and the duration of the working week on the number of cows that one person can manage

Features of labour efficient farms

- Simple farm system that can be easily communicated and operated by others.
- Minimum number of enterprises on the farm (e.g., sale of all surplus calves and contract rearing replacements).
- Suitable cow type that doesn't require individual attention.
- An appropriate calving date and stocking rate for the farm that minimises the need for supplementary feed (reducing both workload and farms costs).
- Good grazing infrastructure that facilitates easy movement of animals to and from grazing by a single operator.
- Adequate well organised farmyard infrastructure that facilitates the easy movement of stock, particularly at calving and calf rearing.

Case study – The Shinagh Demonstration Farm

Seasonal calving workload

A breakdown of the monthly workload to manage a 230 cow spring-calving herd measured on the Teagasc/Carbery Shinagh demonstration farm is illustrated in Figure 2. In total, approx. 4,300 hours are needed to run the farm per year as all of the main tractor operations including silage harvesting, slurry spreading and winter feeding are undertaken by contractors and heifer rearing from 12 weeks to 19 months is also contracted out. When the total figure is divided by 230 cows, the annual labour efficiency figure is 19 hours of work per cow per year.

Nearly 50% of the total hours on the farm are worked during February, March and April. With the use of pregnancy scanning data and fertility reports, this workload is now very predictable. Therefore, the spring workload can be planned well in advance to ensure that adequate facilities, equipment and help is available to cope with the demand. Having the herd of cows in the appropriate body condition score, adequate opening pasture cover to allow cows be turned out to grass as they calve and being personally in good mental and physical health at the start of calving are all very important to reduce the stress associated with compact spring calving. While the farm is run with one person for most of the year, three people work on the farm during February to March to cope with the workload. There

are numerous labour reducing strategies that can be employed during this period such as once-a-day milking during the very busy first three weeks of calving, once a day calf feeding from three weeks of age, night time feeding of dry cows during late pregnancy to minimise night time calving etc.

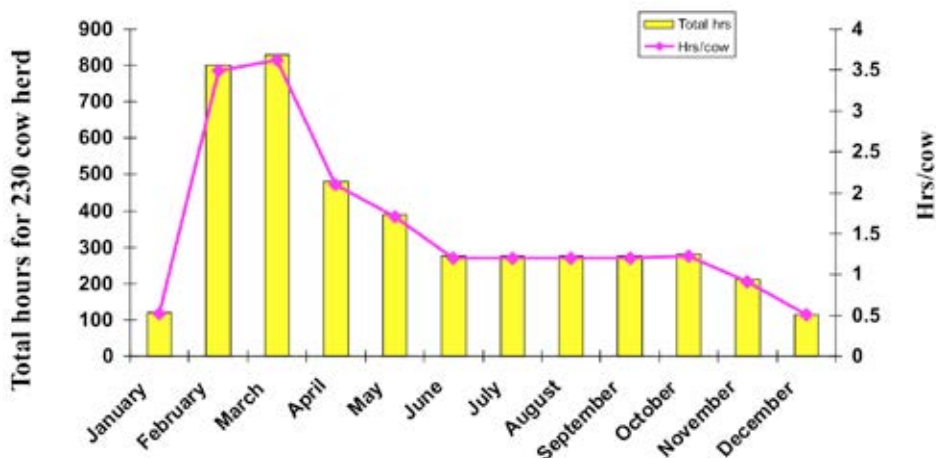


Figure 2. Monthly labour requirement for a compact spring-calving 230 cow herd

Being an employer of choice

Staffing has been problematic on some expanding farms, and recruitment and retention have been regularly highlighted as issues. Having a good working environment on the farm will result in improved work efficiency, increased employee satisfaction and will increase the overall operational efficiency of the farm business. There are a few simple things that can be done to gain a reputation as a good employer.

- Pay a fair wage that reflects staff members' responsibilities and pay on time without exception.
- Allow employees to have a good work life balance. This can be achieved by having regular start and finish times and by working to a roster that provides adequate days off and is organised well in advance.
- Give employees some responsibility and involvement in farm decisions and a degree of control in planning their own workload.
- Ensure a high safety standard on the farm.