



Fig 1. Homescreen on smartphone app

## Context



- Herd size increases following milk quota abolition leading to increased labour demand on farms



- Seasonality challenge with 57% of all farm workload in spring and summer seasons



- Critical to identify an approach to improve seasonal workload and labour demand issues on farms

## Objective

Quantify labour demand and efficiency on spring calving dairy farms in the spring and summer seasons

## Methodology

### Farmer Selection

- Target selection of a proportional sample of farms based on herd size and location
- Smartphone access
- Spring calving herds
- 87 farmers took part and 82 farmers completed the study

### Labour Input Measurement

- January to June 2019
- Once per week on an alternating day each week
- Farmers and workers with a smartphone recorded their time using a smartphone app with 10 tasks (Fig 1)
- Workers without a smartphone and contractor hours were recorded using a weekly online survey

### Data Analysis

- Farms with data for each month analysed (n=72)
- Farms categorised into 1 of 4 herd size categories : 50 to 90 cows ; 91 to 139 cows ; 140 to 239 cows; and  $\geq 240$  cows
- Tukey test used to test for significant differences

## Key Findings

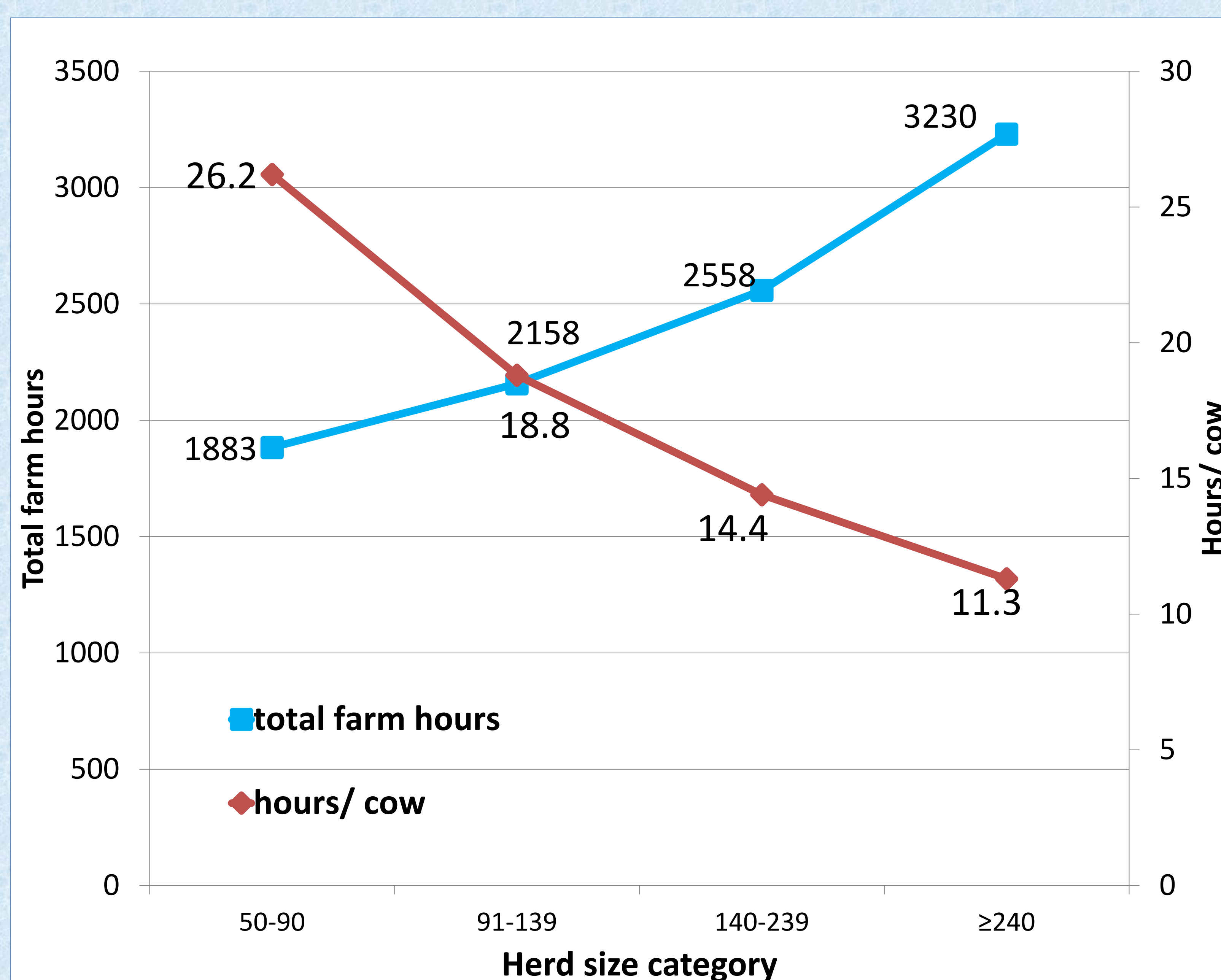


Fig 2. Total farm hours and farm labour efficiency (hours/ cow) for each herd size category

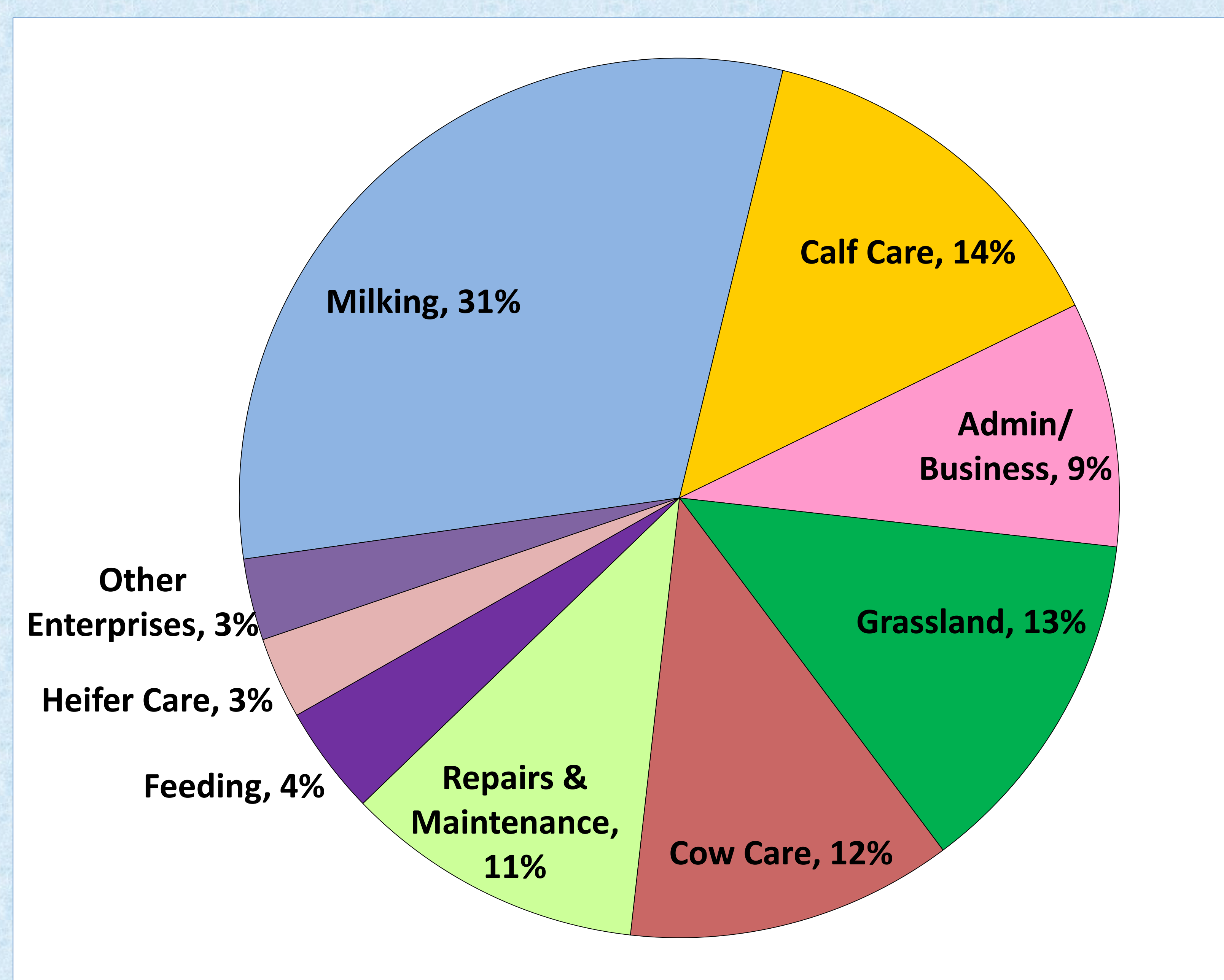


Fig 3. Percentage of time devoted to each task

Large ranges of labour input and labour efficiency within HSC

Herd size does not impede farmers from becoming labour efficient

Milking, as the most time consuming task, should be the first focus for future improvements in labour efficiency