

Northern Ireland Integrated Farm Survey

Results for June 2023



Department of
**Agriculture, Environment
and Rural Affairs**

An Roinn
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NORTHERN IRELAND INTEGRATED FARM SURVEY

2023

RESULTS FOR JUNE 2023

NORTHERN IRELAND INTEGRATED FARM SURVEY – RESULTS FOR JUNE 2023

Key Points

Other Paid Work

- Thirty-nine per cent of people responsible for the day to day running of the farm / farm managers also engaged in other paid work, two per cent were engaged in other paid work classified as farm diversification.

Farmer Demographics

- Ninety-one per cent of farm managers had managed the farm for more than five years.
- Seventy per cent of farm managers had practical experience only, while thirty per cent had completed qualifications / courses.
- Ninety-three per cent of farm managers were male, while six per cent were female.
- Seventy-eight per cent of farm managers were over 45 years old.

Farm Workers

- Ninety-six per cent of farm workers were British or Irish nationals.
- Eighty-seven per cent of farms employed contractors.

Manure Management

- Forty-eight per cent of cattle farms produced mainly cattle slurry with some farmyard manure.
- Sixty-eight per cent of cattle farms broadcast slurry without ploughing and seventeen per cent used a trailing hose.
- Ninety-four per cent of cattle farms stored slurry in below ground tanks.
- Fifty-two per cent of cattle farms use contractors to spread some or all their slurry.
- Seventy-two per cent of cattle farms had uncovered manure storage.

Cattle housing

- Forty-seven per cent of farms housed cattle on both solid and slatted floors.
- Ninety-three per cent of farms do not use automatic scrapers in their cattle housing.
- Seventy-four per cent of farms do not use slat mats in their cattle housing.

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1. Introduction

The Northern Ireland Integrated Farm Survey 2023 records details of farming practices and labour across Northern Ireland. The data included is sourced from additional questions conducted in the June 2023 Agricultural Census.

The Agricultural Census collects data on crop areas, livestock numbers and farm labour. Outputs include time series data and frequency distributions. Results are presented at Northern Ireland and sub-regional level in the report, The Agricultural Census in Northern Ireland 2023, the full report can be found [here](#).

The Integrated Farm Survey questions collected data on farm labour, manure management and cattle flooring and the results are detailed in this report.

Starting in 2023, new methodologies have been adopted to create the Integrated Farm Survey to replace the former EU Farm Structure Survey, which was last undertaken in [2016](#). Topical questions will be identified and added to the Agricultural Census in Northern Ireland questionnaire on a four year cycle to create an ongoing data series on additional topics of interest to both the Department and the industry.

2. Methodology

The Agricultural Census in Northern Ireland 2023 had some 28,441 survey invitations and 15,704 returned forms (a response rate of 55 percent) for 2023. An additional question module was included in the 2023 questionnaire, for the first time, to collect information similar to that last reported in the 2016 EU Farm Structure Survey, the results of which are presented in this report as the first Northern Ireland Integrated Farm Survey.

The population of farms to which the Agricultural Census in Northern Ireland refers includes all active farm businesses having one or more hectare of farmed land, whether owned, leased or taken in conacre, and those with under one hectare having any cattle, sheep, or pigs or with significant poultry or horticultural activity.

The response rate for each of the Integrated Farm Survey questions varied. Consequently, individual questions were treated separately with weights calculated based on each question's response rate. Please see Note 3 on page 31 for a definition of weighted percentages.

The Northern Ireland Integrated Farm Survey 2023 analysis includes the weighted percentages for each question. Where possible comparisons have been made to weighted percentages from the 2022 Farm Census, and the 2016 and 2013 EU Farm Structure Survey, Northern Ireland. Some questions have also been analysed by farm size.

The weights for the questions included on other paid work, farmer demographics, nationality and contractors were calculated using farm type and farm size. Some categories with low responses were grouped together within the farm type and farm size categories to ensure weighting was representative of the population.

The following groups were used for weighting:

Farm Type
Cereals
General Cropping
Horticulture
Pigs
Poultry
Dairy
Cattle and Sheep: Less Favourable Area
Cattle and Sheep: Lowland
Mixed and Other Types

Farm Size*
Very Small
Small
Medium /Large

*With the exception of cereal farms and general cropping farms where small, medium, and large farms were grouped together.

Questions on manure, slurry and flooring applied to cattle farms only. Weighting for these responses were calculated on the size and type of the cattle farm:

Cattle Farm
Dairy Farm - at least 1 Dairy cow
Small Beef Farm - 1-29 cattle (no dairy cows)
Medium Beef Farm - 30-99 cattle (no dairy cows)
Large Beef Farm – more than 100 cattle (no dairy cows)

The survey also included questions on farm diversification and renewables, response rates for these questions were too low to be presented in this report.

3. Labour

The 2023 Agricultural census recorded 52,676 persons working on farms at the 1st June census date, including hired and casual workers, 77 per cent were farmers, directors, partners or spouses.

3.1 Person responsible for the day to day running of the farm / Farm manager

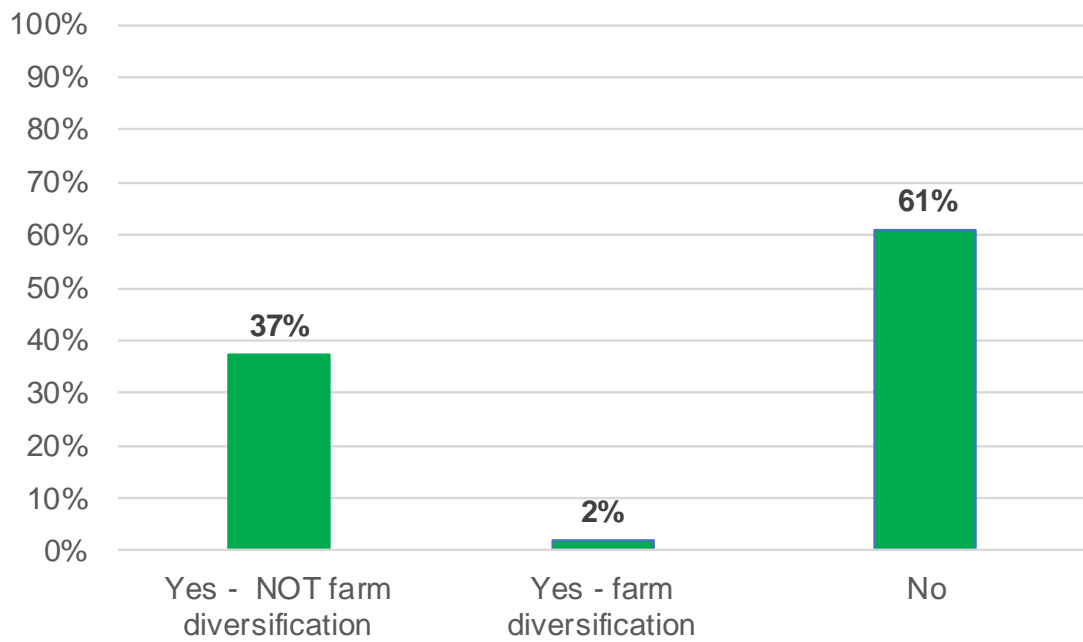
Additional labour questions included in the integrated farm survey asked the respondent to consider only the person who was responsible for the day to day running of the farm when answering questions reported in this section.

3.1.1 Farm Managers Engaged in Other Paid Work

Respondents to the survey were asked if the person responsible for the day to day running of the farm business engaged with any other paid work, including farm diversification work (i.e. other commercial enterprises excluding mainstream farming such as livestock breeding and rearing and crop production, and excluding activities run by persons who are not part of the farm business).

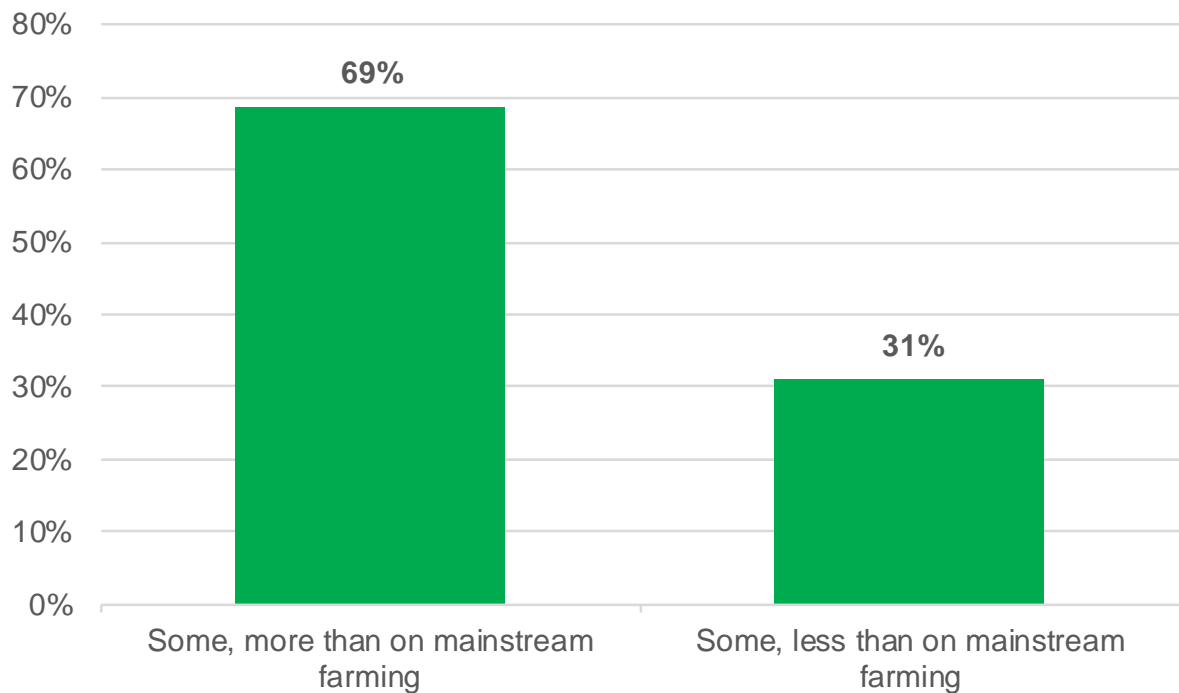
Most of those that were responsible for the day to day running of the farm did not engage in other paid work (61%). Two per cent were engaged in other paid work which was diversification while 37 per cent were engaged in other paid work which was not diversification.

Figure 1. Percentage of Farm Managers Engaged in Other Paid Work



Sixty-nine per cent of those who spent time engaged in other paid work, that was not diversification, spent more time on the other paid work than on farming.

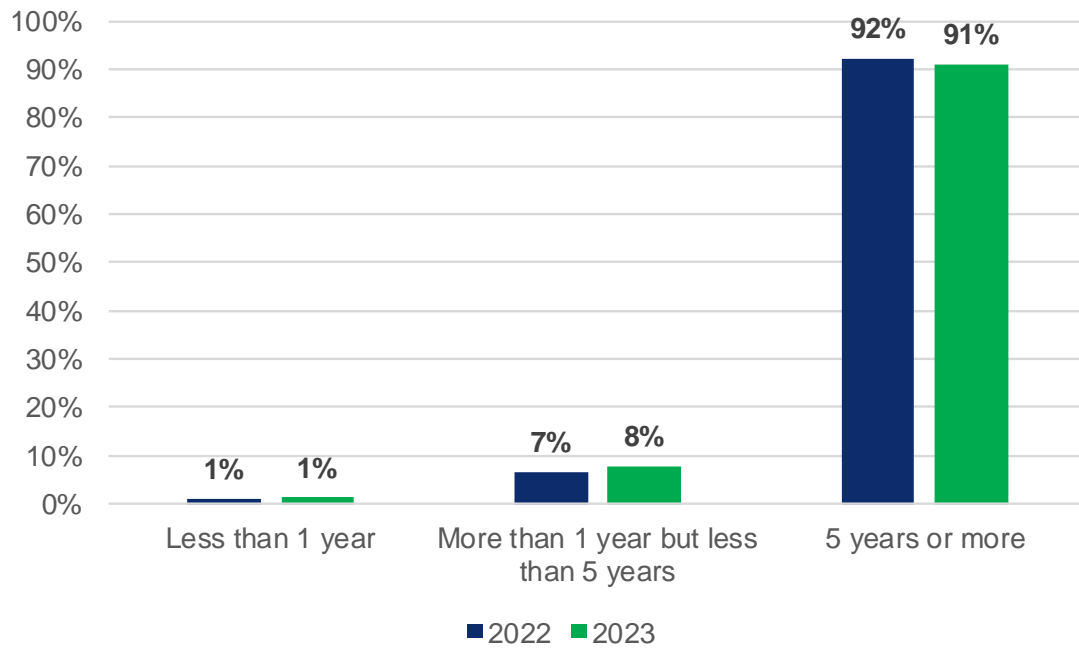
Figure 2. Percentage of time spent engaged in other paid work, not diversification.



3.1.2 Length of time responsible for the farm business

Respondents were asked about the length of time the farm manager has been responsible for the day to day running of the farm. Ninety-one per cent reported running the farm business for more than 5 years, similar to 92 per cent in 2022.

Figure 3. Length of time farm managers have been responsible for the farm business.



3.1.3 Education levels

The survey asked about the highest level of agricultural or horticultural qualifications that the person mainly responsible for the day to day running of the farm had in 2023. These included.

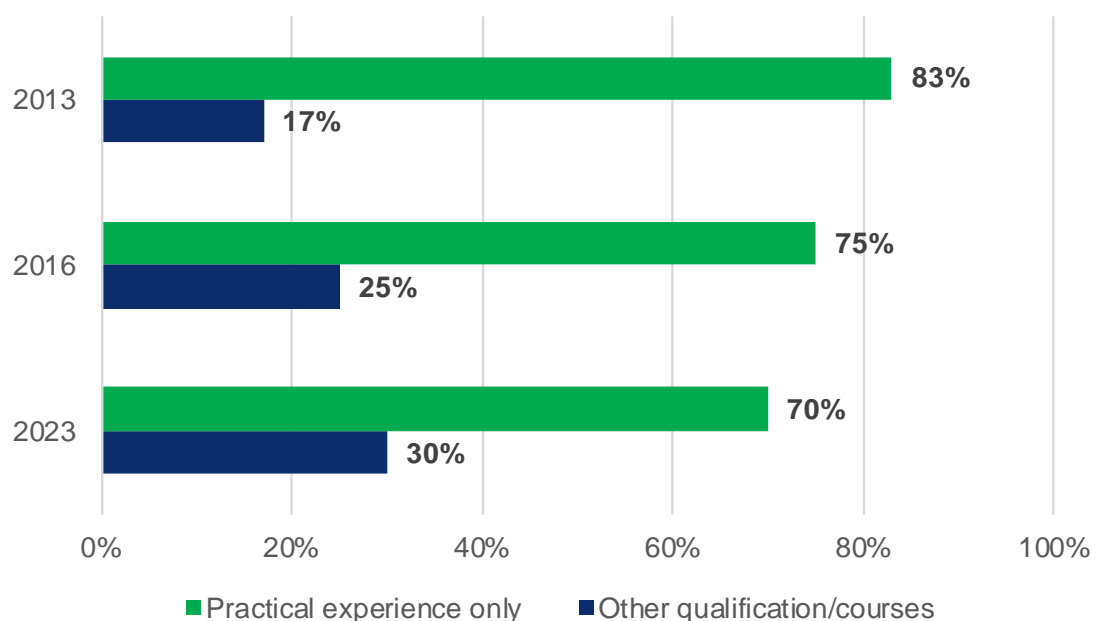
- Practical experience only
- Higher education
- Level three qualification
- Level two qualification

In 2013 and 2016 respondents were asked to indicate any agricultural training that the person mainly responsible for the day to day running of the farm had gained:

- Practical experience only
- Formal course lasting less than 2 years
- Formal course lasting 2 years or more.

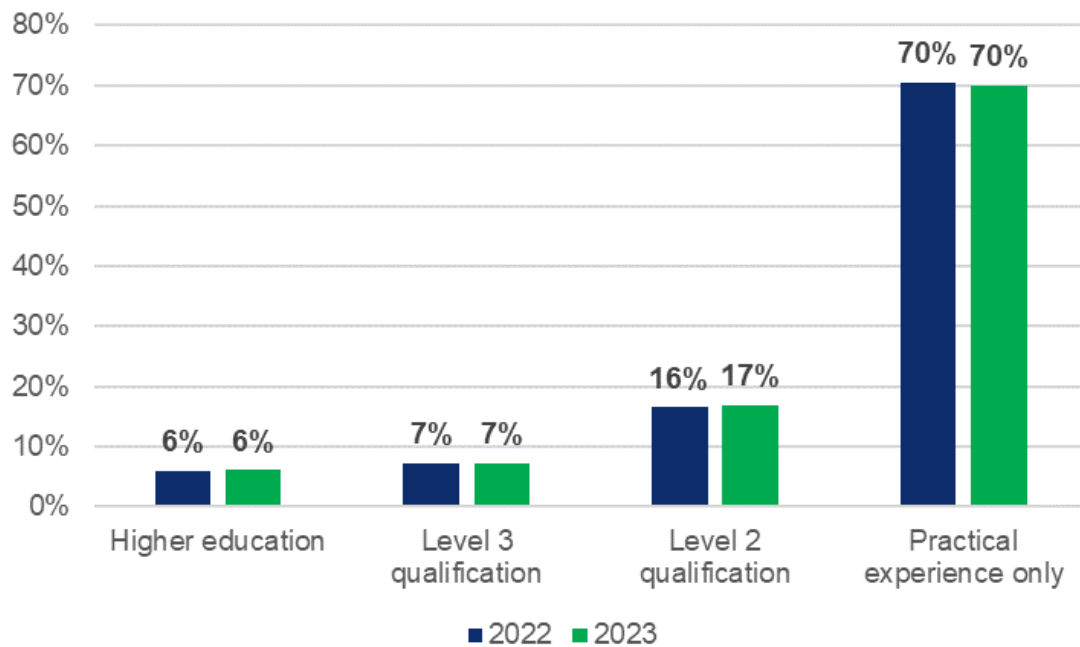
The percentage of farm managers with agricultural or horticultural qualifications has increased from 17 per cent 2013 to 30 per cent in 2023.

Figure 4. Education level of farm managers change over time.



Seventy per cent of farm managers had practical experience only in both 2022 and 2023.

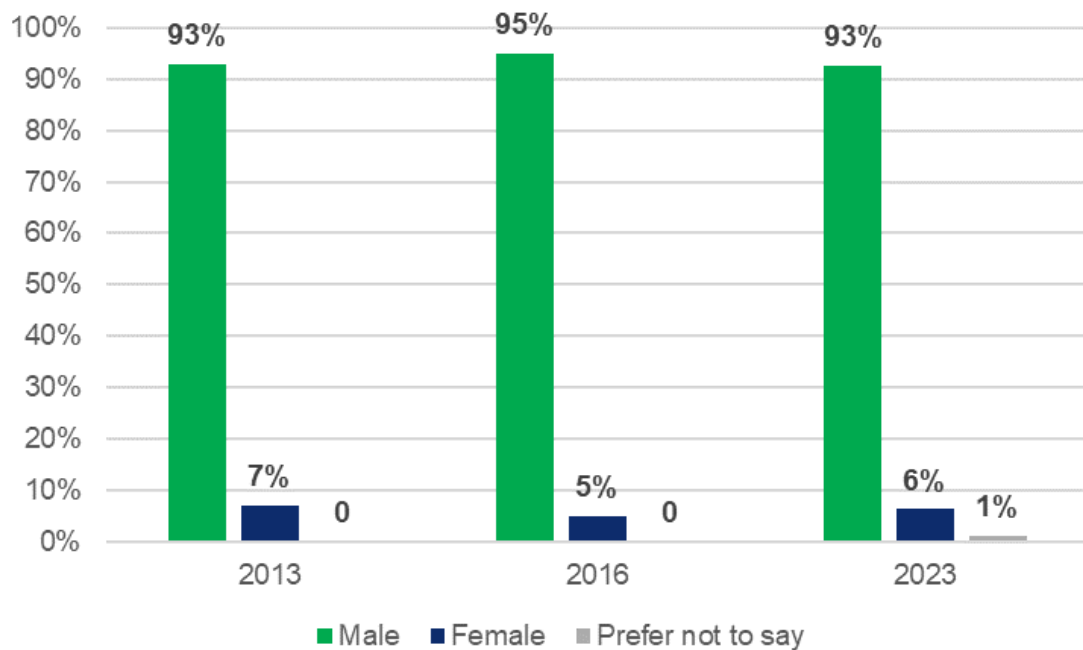
Figure 5. Education level of farm managers



3.1.4 Gender

Respondents were asked the gender of the person mainly responsible for the day to day running of the farm (classified as the farm manager in the EU Farm Structure Survey). Ninety-three per cent of those mainly responsible were male in 2023, a decrease from 95% in 2016, but the same as in 2013 (93%).

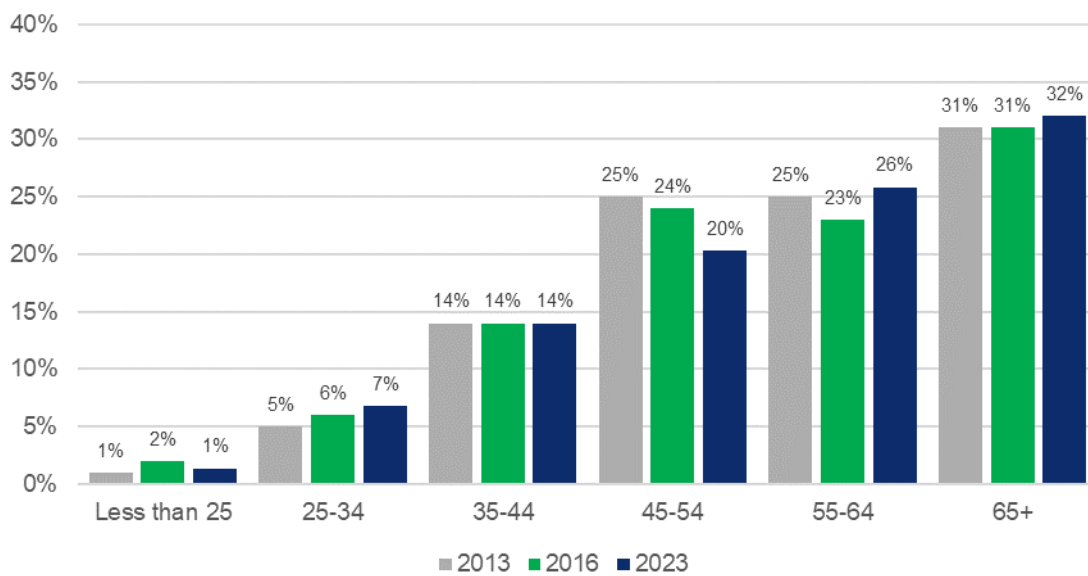
Figure 6. Gender of the person mainly responsible for the day to day running of the farm (classified as farm manager in 2016 and 2013)



3.1.5 Age

Respondents were asked the age of the person mainly responsible for the day-to-day running of the farm. The largest proportion, 32%, were aged 65+ in 2023, similar to the 31% reported in 2013 and 2016. Twenty per cent of those responsible for the day to day running of the farm were 45-54 years, down from 24% in 2016 and 25% in 2013.

Figure 7. Age of the person mainly responsible for the day to day running of the farm



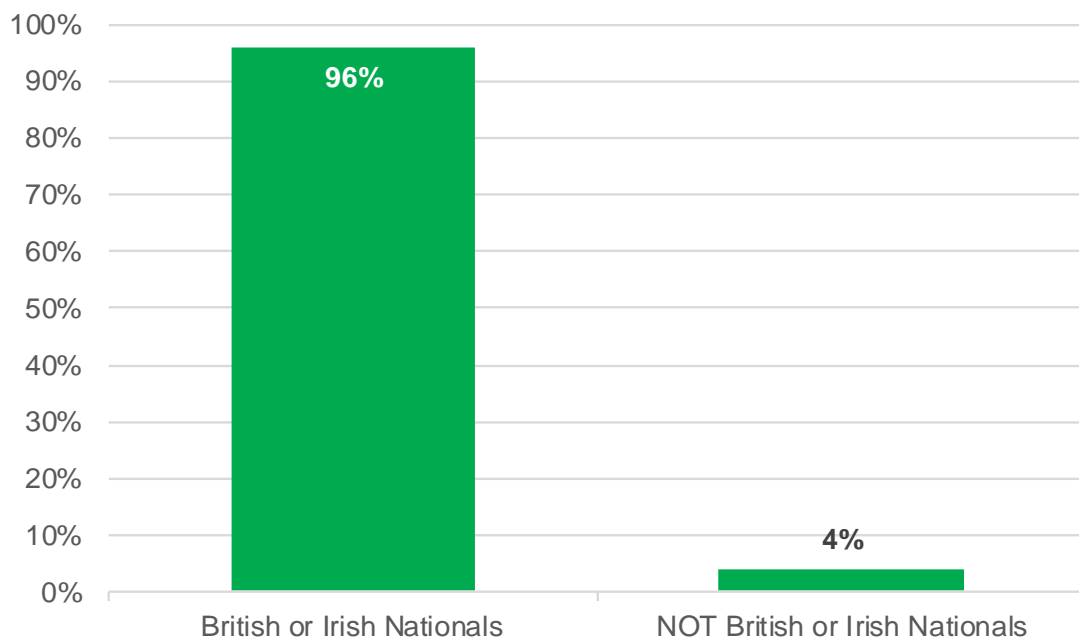
3.2 Farm Workers

The June Agricultural Census, which is one of the main sources of information on the labour input on farms, records persons working on farms at the 1st June census date, including hired casual workers. In June 2023 of the 52,676 total agricultural labour force, 12,091 (23%) were other workers (not farmers, partners, directors, or spouses). Other workers included those who were full-time, part-time, and casual or seasonal workers.

Figure 3.2.1 Nationality of farm workers

The survey asked respondents to provide the number of workers who were not British or Irish nationals. Four per cent of farm workers were not British or Irish nationals in 2023.

Figure 8. Nationality of farm workers

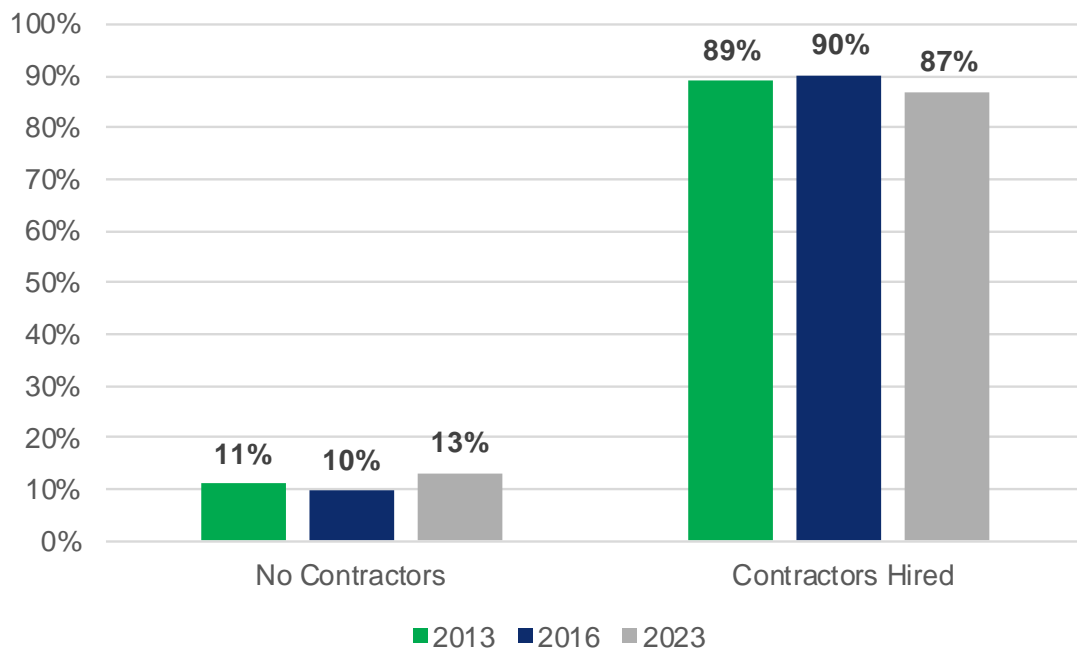


3.3 Contractors

3.3.1 Farms hiring contractors

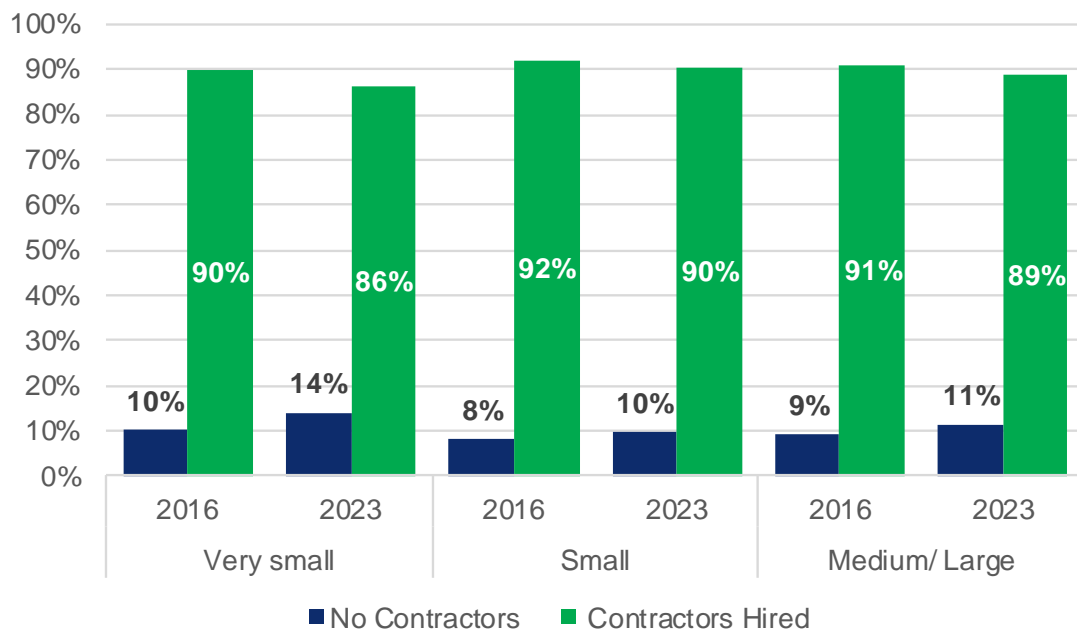
Respondents were asked if they hired contractors in the last 12 months to carry out work on the farm. In 2023, 87 per cent of farms hired contractors, similar to 90 per cent in 2016 and 89 per cent in 2013.

Figure 9. Percentage of farms hiring contractors



Farms that hired contractors were broken down into farm size bands very small, small and medium / large for 2023 and 2016. Across all farm size bands there were small decreases in the proportion of farms hiring contractors in 2023 compared to 2016.

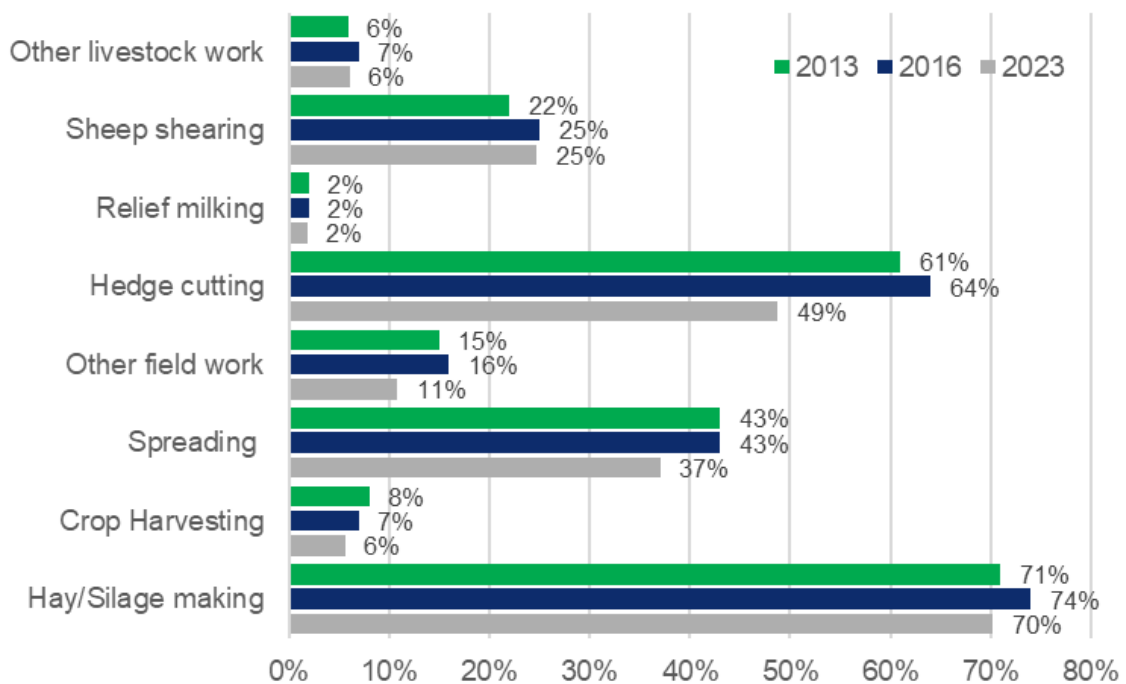
Figure 10 Percentage of farms employing contractors by farm size in the last 12 months.



3.3.2 Activities contractors were hired to perform

Respondents were asked what activities contractors were hired to perform over the last 12 months. Hay / silage making was the highest reported activity in 2023 (70%), 2016 (74%) and 2013 (71%). The largest change was seen in hedge cutting with only 49 per cent of respondents hiring contractors for this in 2023 compared to 64 per cent in 2016 (61%, 2013).

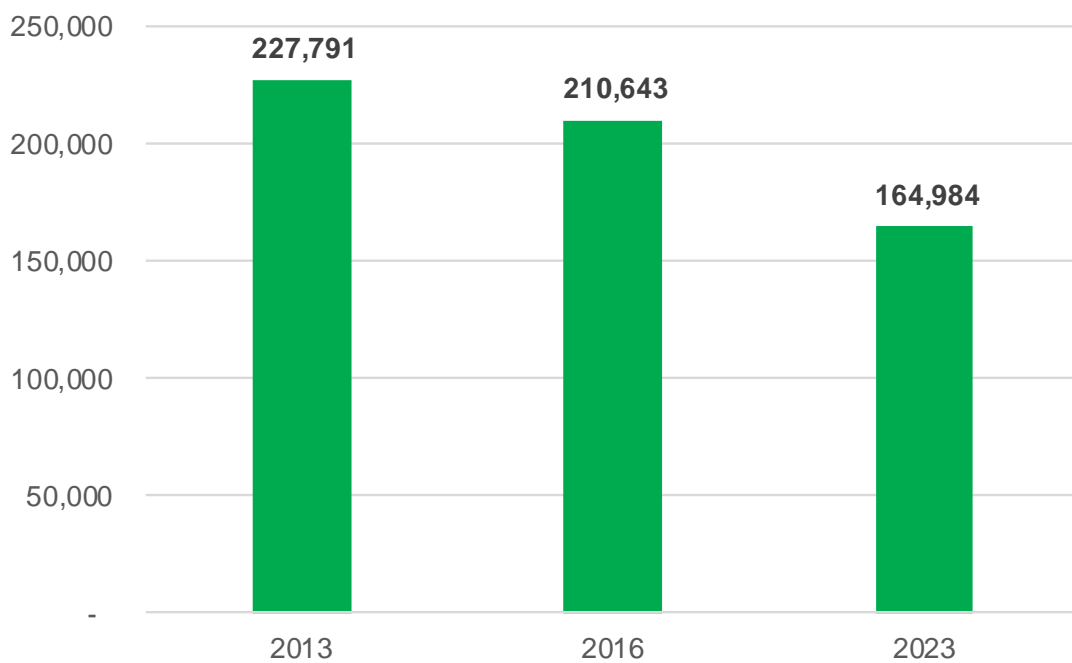
Figure 11. Activities contractors were hired to perform over the last 12 months.



3.3.3 Number of days worked by contractors.

Respondents were asked to provide the total number of days worked by contractors and their staff during the last 12 months (e.g. 3 workers for 2 days = 6 days worked). There has been a 28 per cent decrease in the number of contractor days from 2013 (227,791 days) to 2023 (164,984 days).

Figure 12. Number of days worked by contractors in the last 12 months.



4. Manure and Slurry Management

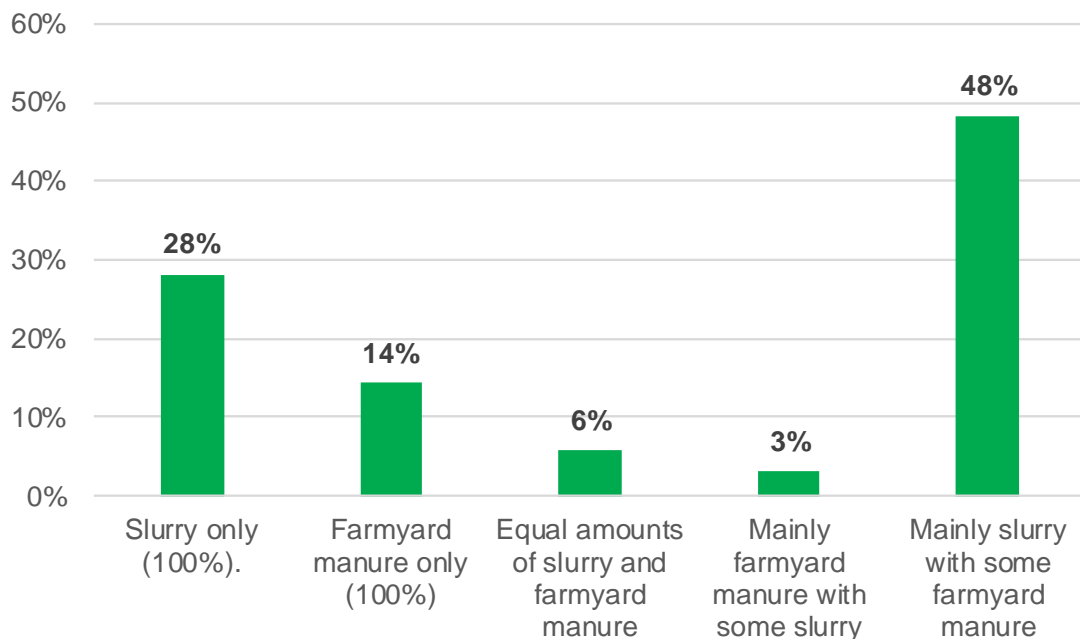
These questions sought to establish how cattle slurry and manure was managed on Northern Irish cattle farms in the 2022 calendar year.

4.1 Manure and Slurry

4.1.1 Farms producing slurry, manure or both slurry and manure in 2022

Cattle farms were asked if they produced slurry or farmyard manure and if they produced more of one or the other. Forty-eight per cent of farms produced mainly slurry with some farmyard manure, with a further 28 per cent producing slurry only.

Figure 13. Percentage of farms producing slurry, manure or both slurry and manure in 2022¹

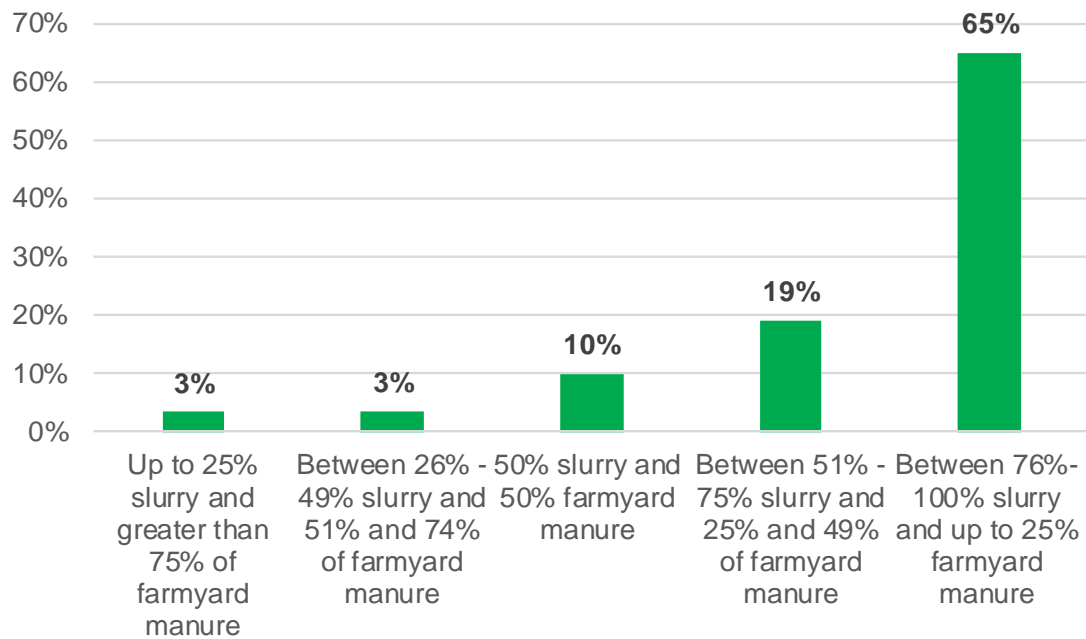


¹ Figures may not sum to 100 due to rounding.

4.1.2 Percentages of slurry and farmyard manure produced 2022

Cattle farms were then asked to estimate the proportions of slurry and farmyard manure they produced in 2022. The majority (65%) reported that the farm produced between 76% to 100% slurry and up to 25% farmyard manure.

Figure 14. Percentages of slurry and farmyard manure produced 2022.

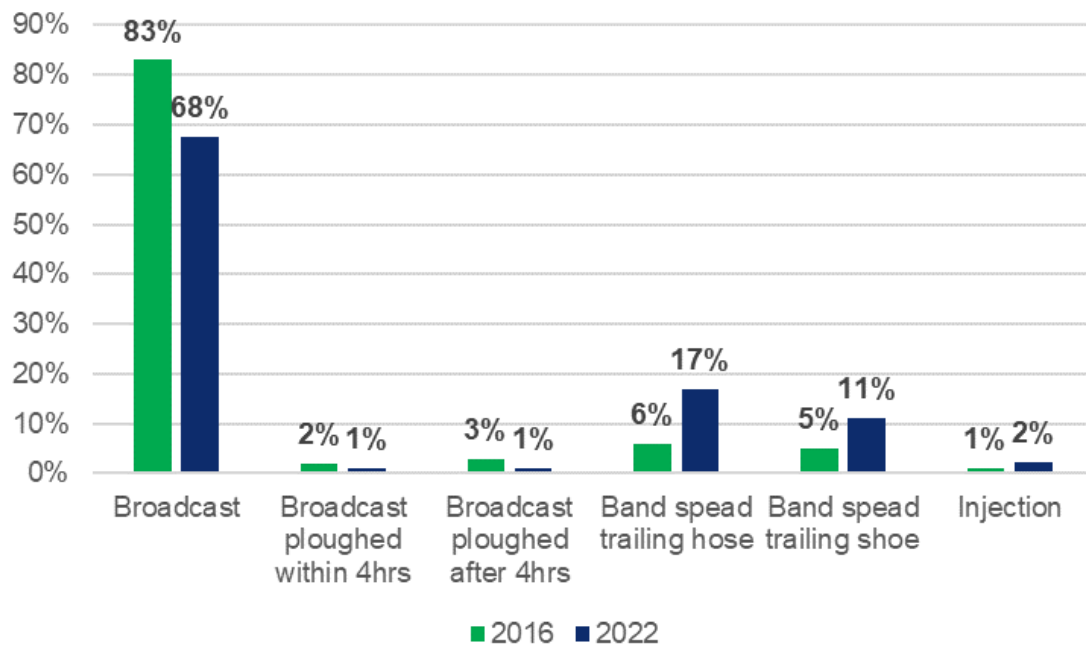


4.2 Slurry Only

4.2.1 Slurry Spreading Methods 2022

Cattle farmers were asked to indicate what methods of slurry spreading they used during the 2022 calendar year, and to provide a best estimate of the proportions spread by each method. Broadcasting slurry was the most common method used in 2022 (68%), but there has been a decrease in the proportion of slurry spread using this method since 2016 (83%). The largest increase has been seen in band spread trailing hose with an increase from 6 per cent in 2016 to 17 per cent in 2022.

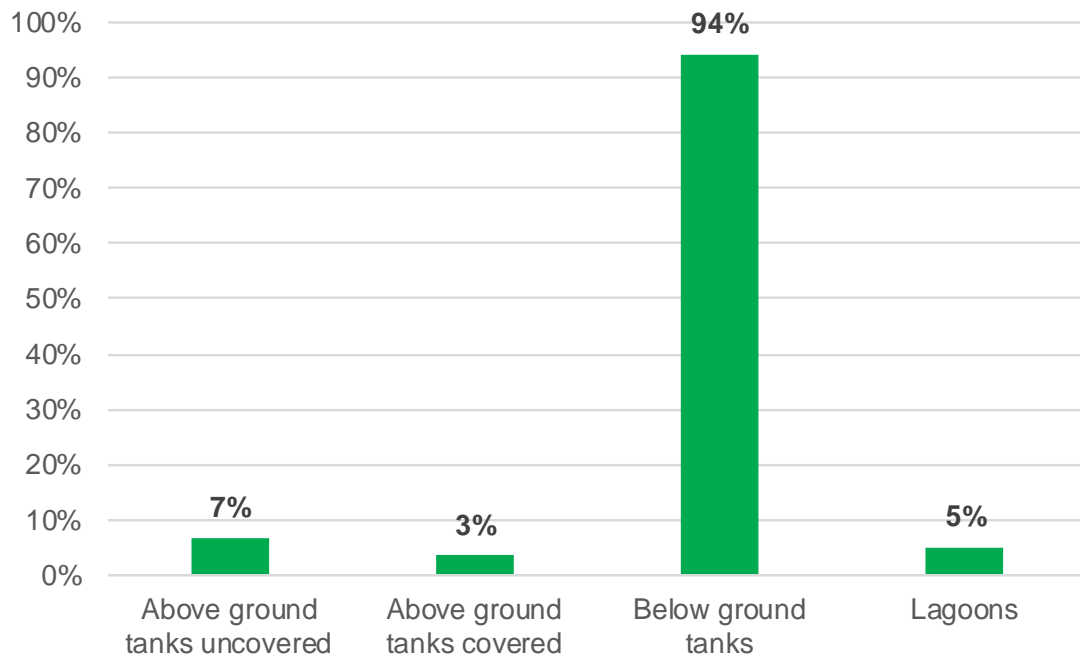
Figure 15. Average percentage of slurry spread using different methods 2022.



4.2.2 Slurry Storage 2022

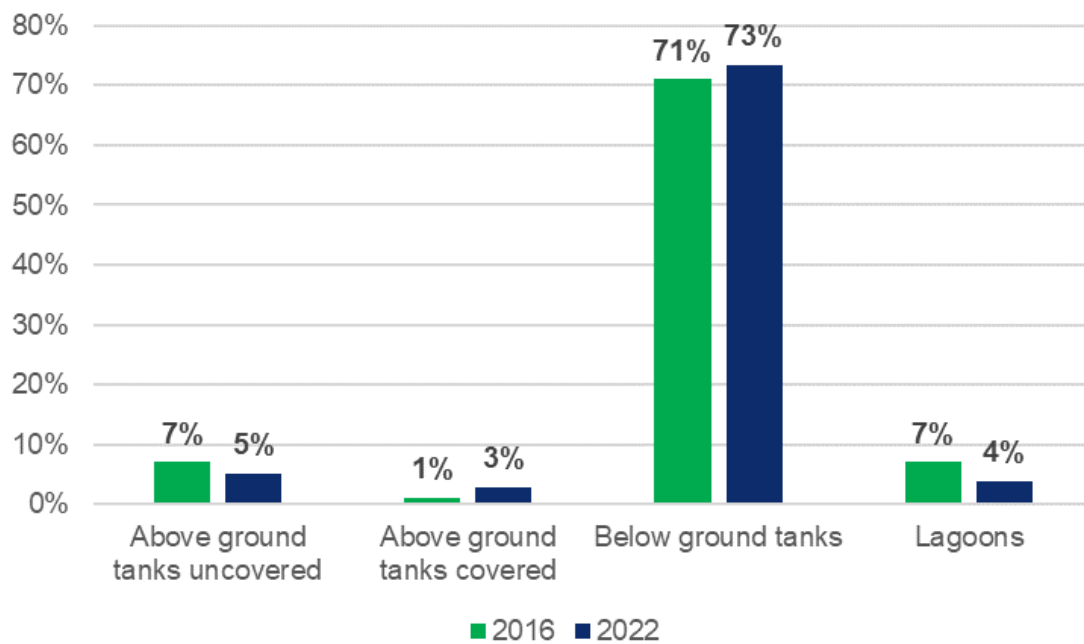
Cattle farmers were asked how they stored slurry in 2022. Farms may use more than one method for slurry storage. Below ground tanks was the most common method for cattle farms in 2022 (94%). Figures weighted for cattle farms are not available for 2016 so no comparisons have been made.

Figure 16. Percentage of cattle farms storing slurry using different storage methods 2022



In the 2016 EU Farm Structure Survey slurry storage questions were weighted against all farms rather than against cattle farms only. To produce comparisons, the 2022 figures have also been weighted by all farms. Below ground tanks were most common for all farms in 2022 (73%) and in 2016 (71%).

Figure 17. Percentage of all farms storing slurry using different storage methods 2022 and 2016, weighted by all farms²

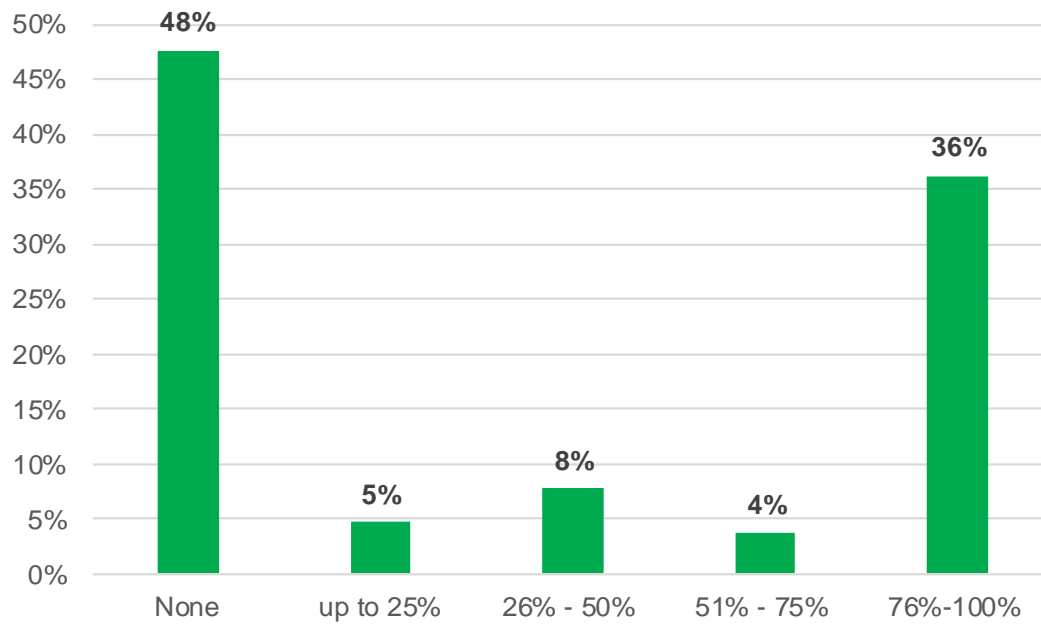


² Farms without cattle may not have slurry storage.

4.2.3 Percentage of slurry spread by a contractor 2022

Cattle farmers were asked how much slurry was spread by contractors in the 2022 calendar year. Forty-eight per cent of farms did not employ contractors to spread slurry.

Figure 18. The percentage of slurry spread by a contractor 2022³



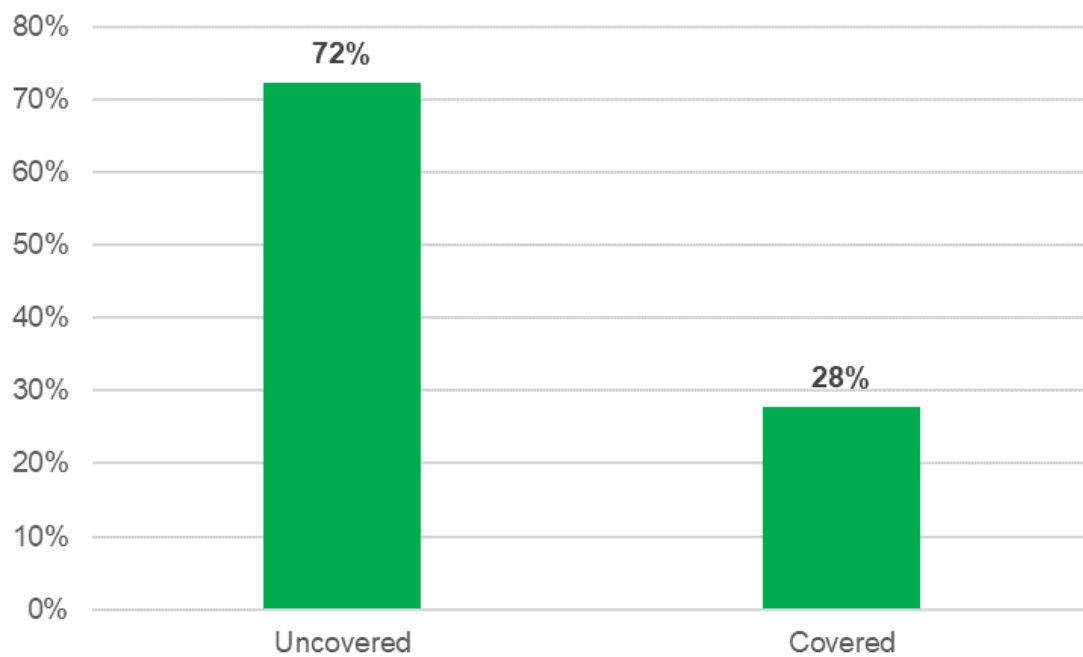
³ Percentages may not sum to 100 due to rounding.

4.3 Farmyard Manure Only

4.3.1 Farmyard Manure Storage Methods 2022

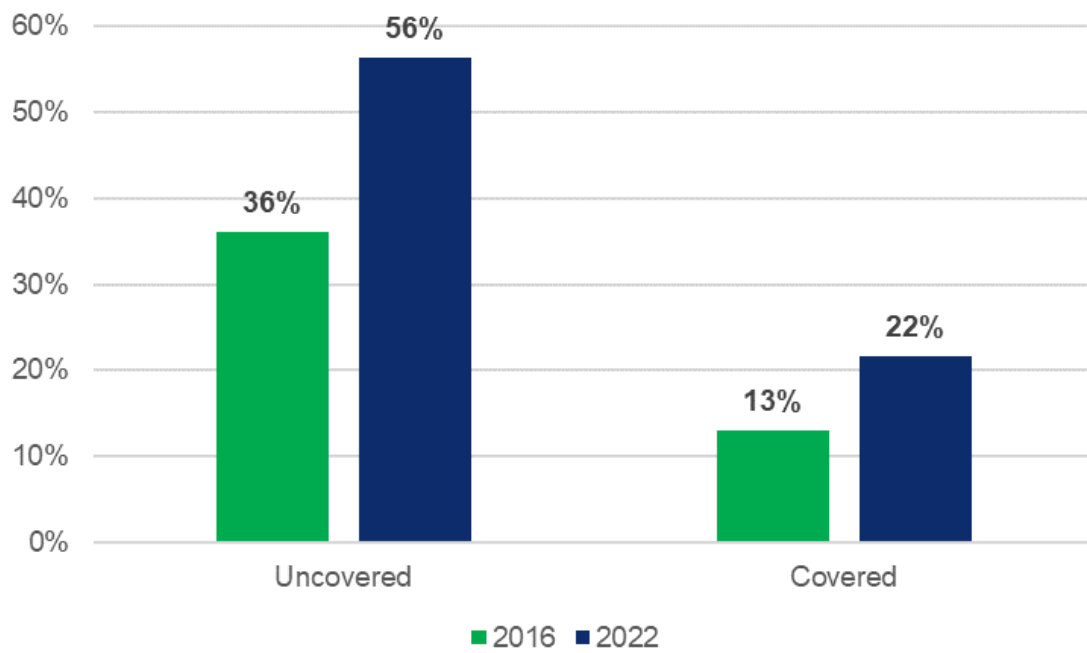
Cattle farmers were asked if their farmyard manure was stored covered or uncovered. Uncovered was more common for cattle farms in 2022 (72%).

Figure 19. Percentage of cattle farms storing farmyard manure by storage method 2022



The published 2016 results for manure storage were weighted by all farms. To compare the 2022 results they were also weighted by all farms rather than just cattle farms. Uncovered manure storage was more common for all farms in 2022 (56%) and in 2016 (36%).

Figure 20. Percentage of all farms storing farmyard manure by storage method 2022 and 2016, weighted by all farms ⁴



⁴ Farms without cattle may not have slurry storage.

5. Cattle flooring

These questions relate to flooring in cattle housing and the use of automatic scrapers as of June 2023.

5.1 Slatted or solid floors

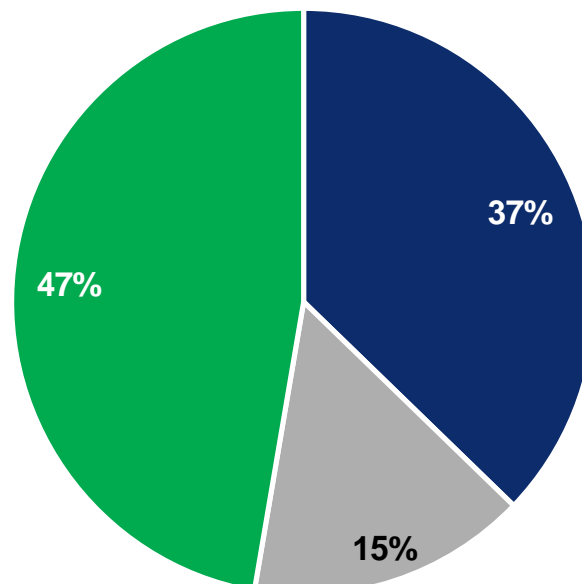
Cattle farmers were asked which of the following statements best describe the flooring in their cattle housing.

- My cattle are all housed on solid floors,
- My cattle are all housed on slatted floors,
- My cattle are housed on both solid floors and slatted floors.

Forty-seven per cent use both slatted and solid floors.

Figure 21. Percentage of slatted, solid or both slatted and solid flooring on cattle farms, 2023⁵

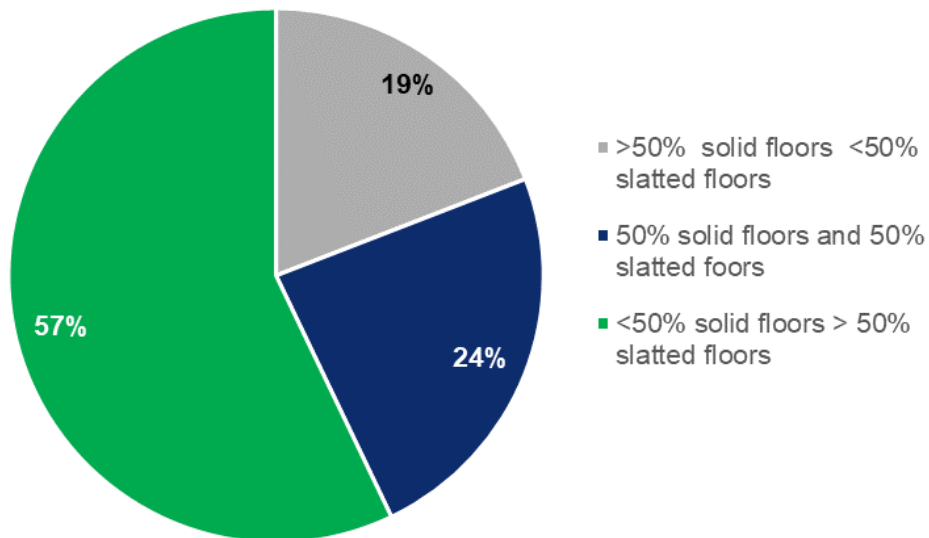
■ Slatted floors ■ Solid floors ■ Both solid and slatted floors



⁵ Percentages may not sum to 100 due to rounding.

Cattle farmers using both slatted and solid flooring were asked to give an estimate of the proportion of each flooring type. Fifty-seven per cent of cattle farms had less than 50% solids floors and more than 50% slatted floors.

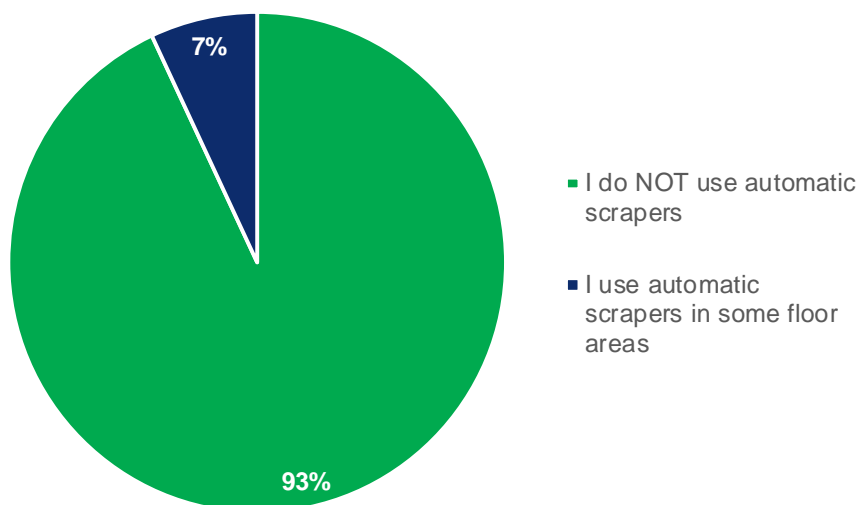
Figure 22. Percentage of solid and slatted floors on farms using both flooring types, 2023



5.2 Automatic Scrapers

Cattle farmers were asked if they used automatic scrapers in their cattle housing. The majority of farms (93%) did not use automatic scrapers.

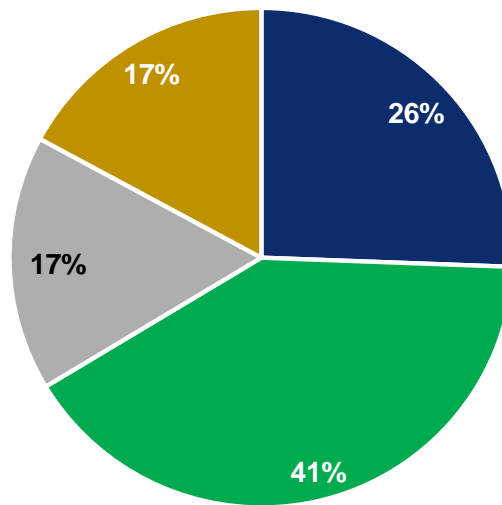
Figure 23. Percentage of farms using automatic scrapers in their cattle housing, 2023



Cattle farmers who answered yes to using automatic scrapers were then asked what percentage of their cattle housing is covered by the automatic scrapers. The most common answer (41%) was between 26% and 50% of the floor.

Figure 24. Percentage of floor area in cattle housing covered by automatic scrapers, 2023⁶

■ Up to 25% ■ 26% - 50% ■ 51% - 75 % ■ 76%-100%



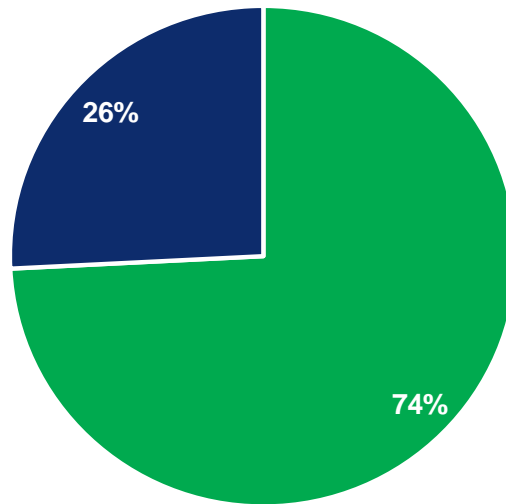
⁶ Percentages may not sum to 100 due to rounding.

5.3 Slat Mats

Cattle farmers were asked if they used slat mats in their cattle housing. The majority (74%) said no.

Figure 25. Percentage of farms using slat mats in their cattle housing, 2023

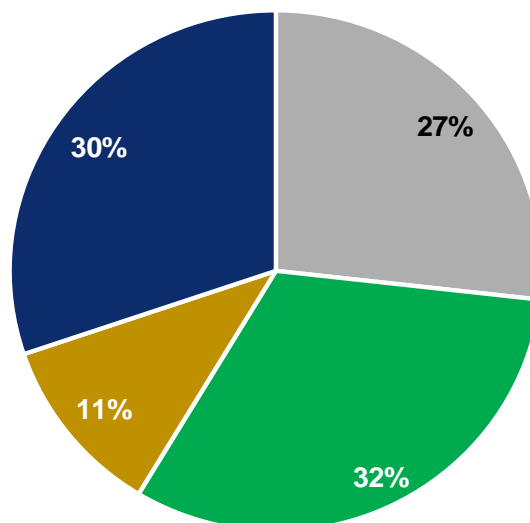
■ No slat mats ■ Use slat mats in some or all housing



The farmers who said they used slat mats were then asked what percentage of their flooring was covered with slat mats. The most common answer (32%) was between 26% and 50% of the floor.

Figure 26. Percentage of slatted floor area which is covered by slat mats, 2023.

■ Up to 25% ■ 26% - 50% ■ 51% - 75% ■ 76%-100%



6. Conclusions

The Northern Ireland Integrated Farm Survey 2023 has set a firm baseline of additional data surrounding farm labour demographics, farm workers, other paid work, slurry and manure management and cattle flooring, providing information that is not available elsewhere. The same questions, included in future years, will provide useful data time series.

In 2023, 93% of those responsible for the day to day running of the farm were male, 78% were over 45 years old, 70% had practical experience only and 91% had been responsible for the day to day running of the farm for more than 5 years.

In terms of slurry and manure management, broadcast slurry without ploughing is the most common method of spreading slurry (68%), storing slurry in below ground tanks is the most utilised storage method (94%) and 52% of cattle farms use contractors to spread some or all their slurry. Almost half of cattle farms house cattle on both solid and slatted floors, 93% of cattle farms do not use automatic scrapers and 74% do not use slat mats in their cattle housing.

Looking at comparisons with the 2016 and 2013 EU Farm Structure Surveys for Northern Ireland there is little change in some trends over this time period. In 2023 87% of farms hired contractors, similar to 90% in 2016 and 89% in 2013. Other areas, such as the education level of the person responsible for the day to day running of the farm have seen an increase from 17% in 2013 to 30% in 2023 of those that have a relevant qualification.

This report is intended to be the first in a series to be reproduced every 4 years. Statistics and Analytical Services Branch would welcome any comments on this report or requests for further analyses. Please direct any queries to Danielle Clarke, danielle.clarke@daera-ni.gov.uk.

7. Notes for Readers

1. The survey results were prepared by statisticians from the Northern Ireland Statistics and Research Agency (NISRA) working within DAERA. Further information about NISRA can be found: <https://www.nisra.gov.uk/>
2. The survey results reported here were collected as a module in the annual agricultural and horticultural census survey. Full details on the methodology, coverage of the agricultural and horticultural census and terms are available in the Agricultural Census Methodology and Quality report which can be found: <https://www.daera-ni.gov.uk/articles/agricultural-census-northern-ireland>
3. A weighted percentage is a percentage that is adjusted to reflect the contribution of each farm size and type to the total. When calculating a weighted percentage, a specified weight is multiplied by each value in the data set based on the farm size and type of that respondent. i.e. when a farm is part of a more common type and size these values will carry more weight in the total figure than a farm which is part of less common type or size.
4. Enquiries about this Integrated Farm Survey publication should be addressed to:

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All media queries should be made to DAERA Press Office on 028 90524619

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