Overview - Agricultural Statistics and Climate Change (10th Edition)

The tenth edition of Agricultural Statistics and Climate Change, published on the 24th of September 2020, is an overview of previously published national level statistics on agriculture. Published every year since 2011 (with the exception of 2018), it provides background context to the current understanding of agriculture and greenhouse gas (GHG) emissions and explains the gaps, uncertainties and limitations in the statistics. The publication also includes information on current research and some international comparisons.

This latest edition includes links to results from the 2020 Farm Practices Survey and the 2019 British Survey of Fertiliser Practice and updates the indicator framework that monitors greenhouse gas emissions from agriculture. Other charts and tables have also been updated where more recent data are available.

The methodology used to report emissions from agriculture has been predominantly based on the number of livestock animals and the amount of nitrogen based fertiliser applied. A variety of factors which influence emissions cannot be captured by this methodology (e.g. soil conditions, weather, farm practices) and as a result there are relatively large uncertainties around the estimates for agricultural emissions. Research has been undertaken to enable future estimates to better reflect the true position; Defra and the Devolved Administration Governments have invested over £12 million in the development of an improved GHG Inventory for agriculture. Improved emissions factors from this research has been incorporated into the UK agricultural GHG inventory and implementation of the new model took place for the 2017 inventory submission.

This publication provides valuable information during the transition to an improved GHG Inventory and brings together a range of statistics that relate directly and indirectly to emissions, which can give an indication of whether agriculture is increasing its efficiency in ways that reduce GHG emissions. These include data on slaughter weights and ages, feed conversion ratios, livestock mortality, fertiliser use and land use. Data relating to on-farm practices can give a picture of farmer awareness and the level of uptake of measures to reduce emissions. For example:

- In 2020, 65% of farmers thought it important to consider GHGs when making farm business decisions.
- Overall, 66% of farmers were taking actions to reduce emissions. The most common actions to reduce GHG emissions (cited by more than half of those undertaking actions in 2020) were recycling waste materials, improving nitrogen fertiliser application and improving energy efficiency.

The full publication is available here