

Uses and Users of British Survey of Fertiliser Practice Statistics (GB)

1 Introduction

The British Survey of Fertiliser Practice is an annual, nationally representative interview survey based on the selection of a random stratified sample of farms from Great Britain. The survey has been in existence, in various forms, since 1942 for England & Wales. It was extended to Scotland in 1983.

The main purpose of the survey is to estimate average application rates of nitrogen, phosphate and potash used for agricultural crops and grassland. Information is also collected on applications of sulphur fertilisers and lime. In recent years it has also collected increasingly detailed information on organic manures. Since 2007, in an effort to better quantify the organic manure data, farmers were asked to provide a specific rate of application rather than the previous system of asking whether their manure applications fell within pre-specified 'high', 'medium' and 'low' ranges.

The current methods of survey design and implementation are the result of adaptation of the original design from Rothamsted Experimental Station, undertaken by Edinburgh Data Library at the University of Edinburgh between 1992 and 1998. From 1999 until 2003 design and analysis was undertaken by the Rural Business Unit at the University of Cambridge and from 2004 by GfK Kynetec (formerly Kynetec Limited), who also retained responsibility for conducting the fieldwork, data quality control and statistical analysis.

Official quantities of nitrogen, phosphate and potash fertiliser consumed annually in the UK since 1965 are provided also. These data are based on BSFP findings and confidential trade and sales data which are contributed by AIC (Agricultural Industries Confederation) industry members who represent over 90% of the market. They are compiled by the AIC in conjunction with Defra.

The annual Report and key historic datasets are published [here](#).

2 Known users of the Fertiliser Practice Statistics

The results from the Survey are widely used by the UK government and the EU, the British fertiliser industry, by researchers and by the wider agricultural community.

The Survey data provide important evidence to assess greenhouse gas emissions from agriculture, informing the ammonia and greenhouse gas inventories and for the development of possible mitigation measures. Additionally the data provide information on fertiliser use in NVZs (nitrate vulnerable zones) and for developing and assessing the impact of policy on water quality, particularly the Nitrates Directive (Council Directive 91/676/EEC). The data have also been used for indicators on nutrient balances, other indicators relating to environmental impacts and other cross cutting work looking at links between fertiliser use and productivity (benchmarking) and economic performance. Industry and government use the data to monitor best practice. Information on all of these topics are available from the Gov.UK [website](#) and includes statistical information on [greenhouse gas emissions, climate change](#) and [NVzs](#) which are of particular relevance.

The data are also used to meet certain legislative obligations at a national and EU level. Information on the use of fertilisers across the EU is available from the Eurostat [website](#). It includes a summary report with a comparison of the usage and links to detailed data for the individual countries.

3 Valid uses of the Fertiliser Practice Statistics

The key information provided by the British Survey of Fertiliser Practice statistics is :

- Overall rates of use of nitrogen, phosphate and potash on major tillage crops and grassland (excluding rough grazing). The average field rate and the percent of the crop areas receiving the dressing are included also for Great Britain, England and Wales and Scotland; key information is available at Government Office Region (GOR) level for England and Wales.
- Fertiliser use by farm type ie cereal farm, general cropping and horticulture, dairy, other livestock and mixed practice farms for Great Britain.
- Timing of application of fertiliser application in Great Britain with figures for England and Wales and Scotland also.
- Type of fertiliser production used eg nitrogen applied as ammonium nitrate, urea, calcium ammonium nitrate etc for Great Britain or England and Wales.
- Proportion of straw removed from wheat and barley fields in England and Wales or Great Britain.
- Quantities of nitrogen, phosphate and potash used in the UK with a breakdown for England and Wales, Scotland and Northern Ireland. These data are based on BSFP findings and confidential trade and sales data which are contributed by AIC (Agricultural Industries Confederation) industry members.
- Application rate and dressing cover of various organic manures such as slurry on tillage crops and grassland, including application method and timing and incorporation practices in Great Britain.

Figures reported for some of the smaller crops, where the sample size is relatively low, need to be treated with appropriate caution. Sample size information is provided in the report and help to provide an indication of reliability. For crops where the sample size is relatively small it is advisable to use data from several years and to assess trends over a longer time period rather than just considering year on year changes

The British Survey of Fertiliser Practice has focussed historically on the application of manufactured fertilisers. The underlying sample design is constructed to measure manufactured fertiliser usage and may not represent the population of farmers using organic manures as robustly as manufactured fertilisers.

4 Areas of Unmet Need

Requests that we have received from customers have included :

- (i) Separate breakdown of information for Wales rather than England and Wales. The sample size for Wales is limited which has implications for the robustness of the data and some data confidentiality issues such that data just for Wales are not routinely published.
- (ii) Information on soil testing. Questions were added to the 2012 survey form which have now been refined for 2013.
- (iii) Information on security measures associated with the storage and use of fertilisers. Additional questions have been added to the 2013 Survey.
- (iv) Information on the use of anaerobic digestate. Additional categories have been added to the 2013 Survey.

5 How to Comment and Get Involved

We recognise that users will have different needs and requirements. There is a set of core survey questions which will collect all of the base information on the application of the fertilisers.

We engage regularly with key internal users on their requirements and with industry through the Agricultural Industries Confederation (AIC). At an EU level, legislative requirements are developed and negotiated through the relevant working group. Where appropriate we will consult with customers on developments and changes to our statistical methodologies and publications. Engagement with other customers is usually through the website publication. Defra carried out a consultation on all its statistics in 2010 and latest feedback from 2012 has been published on the [website](#) also.

We welcome feedback on the survey and the data from all users or information on how the data are used. This will enable us to identify how and why our statistics are being used and hence the value of the statistics to external users and if there are any unmet needs. This can be provided to :

Lindsay Holmes
Crop Statistics
Defra
Foss House
Peasholme Green
York
YO1 7PX

Email: lindsay.holmes@defra.gsi.gov.uk
Tel: +44 (0) 1904 455563
Fax: +44 (0) 1904 455060

Twitter : @DefraStats