Mark Pont, Assessment Programme Lead

Roger Halliday
Chief Statistician and Data Officer
Scottish Government
(by email)

27 March 2019

Dear Roger

STATISTICS FROM THE SCOTTISH JUNE AGRICULTURAL CENSUS

As you are aware, we recently completed a compliance check of Scottish Government's statistics from the Scottish June Agricultural Census. I am pleased to confirm the continued designation of these statistics as National Statistics, subject to your team addressing the areas highlighted below. Our Agriculture and Environment Domain Lead, Job de Roij, will continue to engage with the agriculture statistics team on progress over the coming months.

We initiated this review to better understand the state of agriculture statistics in Scotland and due to the time elapsed since the previous assessment. To gain a perspective across the Devolved Administrations, we also carried out reviews of statistics from the Northern Ireland June Agricultural Census, produced by the Department for Agriculture, Environment and Rural Affairs (DAERA), and statistics from the Welsh Agriculture and Horticulture Survey, produced by the Welsh Government.

We commend the team on the recent improvements to the statistical bulletin. It has been developed into a modern, informative and engaging publication that sets an example for statistics producers of how statistics can add value. The bulletin was clearly re-designed with a range of users in mind, including policy teams and lay readers. The statistics team has thought carefully about how it can help users answer key questions on the farming sector in Scotland, by structuring the bulletin around the main messages. The commentary is clear, insightful and accessible and is supported by good data visualisations that aid interpretation of the statistics. We think the bulletin would make a good candidate for a case study for the Code of Practice for Statistics.

We welcome the team's approach to developing the new bulletin and its close engagement with stakeholders and users throughout the process to ensure that the statistics meet user needs. The team has actively promoted and collected feedback on the new bulletin. In December 2018, it carried out a feedback survey for policy colleagues and in February, it arranged a meeting with policy teams to discuss their future statistical needs. The team has also invited comments from members of the public through presentations at public events and presented the statistics at conferences. We welcome this wide engagement and the insights it provides into user needs.

These improvements demonstrate strong statistical leadership and professional judgement, and reflect the ambition for these statistics, and for the portfolio of Scottish agricultural statistics as a whole. The team shared the improvement plan for the portfolio and told us about a range of interesting and innovative data science and analysis projects. It is encouraging that many of the areas for improvement outlined in this letter already feature on the plan; this illustrates the team's forward-thinking approach and its engagement with the Code. We look forward to seeing the results of the improvement plan and encourage the team to continue to build on successes so far.

Our review identified several ways in which the team could further enhance the value of the statistics, for example:

- The bulletin focuses exclusively on short-term trends, and it is not immediately obvious from the commentary that comparisons are between the current year and the previous year.

Longer-term trends are also part of the story, and an overview of long-term trends might provide more insight by helping users put recent changes into context.

- In general, we encourage your team to add more contextual information to the commentary, such as offering reasons for large changes, to aid users' interpretation of the statistics. To help users understand the policy context, it might be useful to highlight what policies the data and statistics inform, at the Scotland level, UK level and international (EU) level.
- It would be helpful to signpost users to related farming statistics across the UK by including links to the statistics from the June Agricultural Census produced by the Welsh Government, DAERA and Defra.
- We encourage you to minimise the use of jargon and add definitions where possible to help a wide range of users understand the statistics.

The information about the quality of statistics could be improved. The methods used, including calculation of the estimates and imputation, are explained well and limitations are discussed. But, the bulletin contains limited information on the survey sample design, the move to the online census and its impact on the survey response rate. Similarly, it only contains a brief description of the cattle administrative data source (the Cattle Tracing System (CTS)) but no discussion of its strengths and limitations, or how the data are quality assured. To help users better understand the data sources and to reassure them about data quality, we recommend adding more information to the methodology and quality assurance report. For survey data, inclusion of confidence limits would offer insights into uncertainty around the estimates. For administrative data, better communication of quality assurance arrangements would help users understand how the cattle data are collected and processed. We welcome that your team is already considering these areas for improvement and that it intends to use our [Quality Assurance of Administrative Data toolkit](#).

We encourage your team to continue to collaborate with statisticians in DAERA, the Welsh Government and Defra, to ensure a consistent and coherent approach to producing statistics from the June Agricultural Census across the UK.

We also encourage you to reflect on the findings from this compliance check when producing statistics from the December Agricultural Survey, a survey with similarities to the June Agricultural Census, and other agricultural statistics.

Please let me know if there is any aspect of this letter that you wish to discuss.

I am copying this letter to: Alastair McAlpine, Senior Statistician and Head of Agricultural Statistics; and Scott MacFarlane, Assistant Statistician on Scottish agriculture statistics.

Yours sincerely

Mark Pont
Assessment Programme Lead