Innovation in action

Validating a unique, fully integrated egg and poultry carbon footprint tool

CIEL supported industry-led research

Challenge

The production volume of eggs worldwide exceeded 86 million metric tons in 2020, up from 74 million in 2016. Since 1990, the global egg production volume has increased by over 100 percent. A key reason is that chicken eggs are not only a valuable source of protein, but also an affordable resource for any pocket. Whilst the poultry industry has a low carbon footprint compared with the dairy, beef and lamb sectors, minimising the environmental impact of a sector experiencing such huge growth could offer big sustainability rewards.

Eggbase
Unlock the power of data

SRUC

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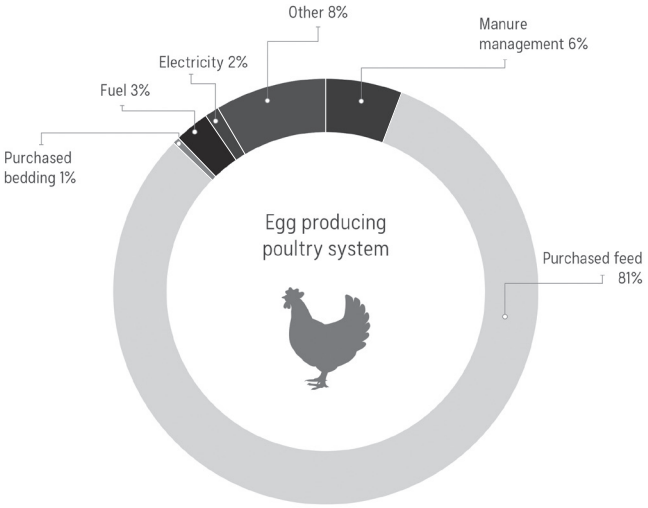
Action

CIEL Member Eggbase Ltd is an agri-IT company that develops software applications for egg packers, egg producers and pullet rearers. The company teamed up with Scotland's Rural College (SRUC) to demonstrate the value & strength of their specific carbon footprinting tool. The technology uses data entered into Eggbase cloud software for daily production recording, data visualisation and legislative compliance.

Applying the carbon footprint tool to SRUC's large database of historical egg production data generated from historical research trials enabled sight of the natural variation in the carbon footprint and the potential production efficiency range for each trial dataset. The study demonstrated the value and the strength of the Eggbase carbon tool. Results also revealed a high level of natural variation within the individual trials. With egg production, to gain the most accurate footprint it is imperative reports are generated on a flock basis.

Impact

The integration of all carbon footprint calculations into Eggbase allows for full transparency and an audit trail of carbon footprint figures. Direct, accessible visibility of the contribution of each component to the carbon footprint enables the producer to focus on the reduction of emissions for each component, thereby identifying cost savings, optimising production and improving bird welfare. The technology similarly allows packers to report to their retailers, and suppliers to test the environmental impact of their products.



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