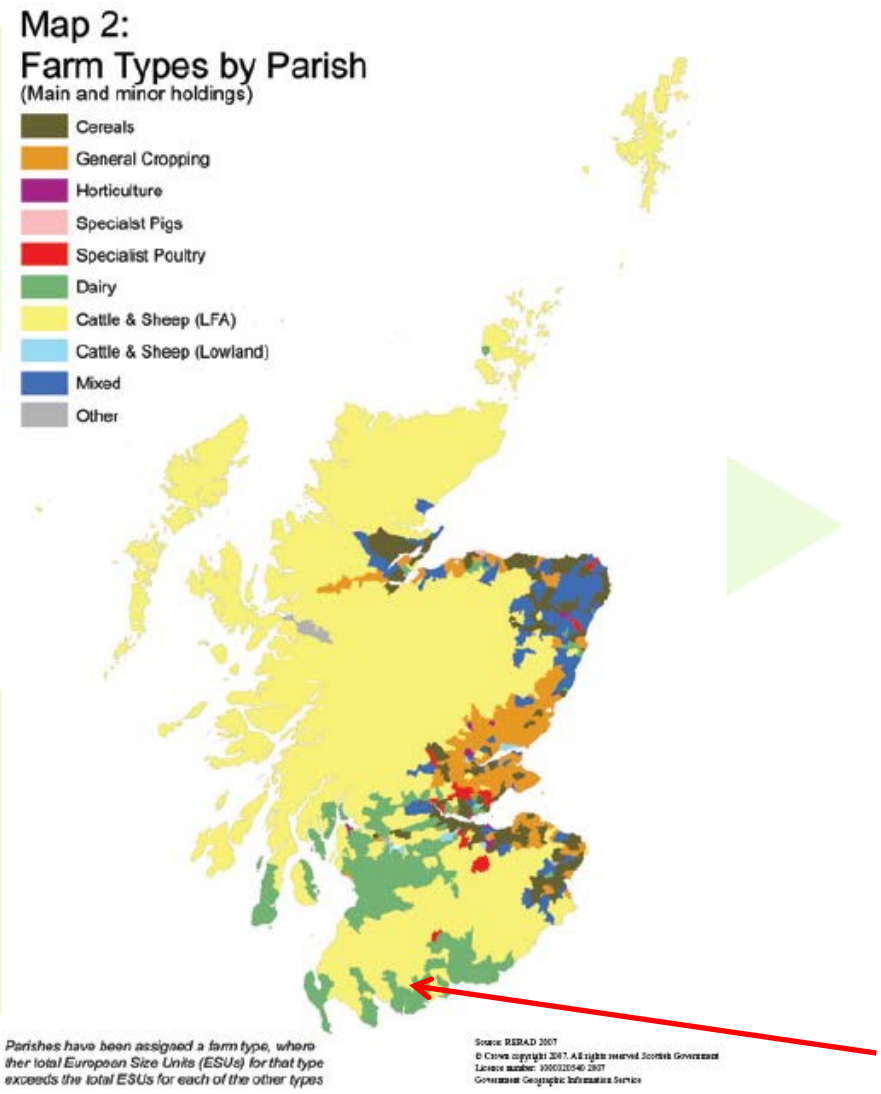
Dairy Farming Systems and the environment

Dave Roberts
Head SRUC Dairy Research Centre
Crichton Royal Farm
Dumfries

SRUC systems research centres



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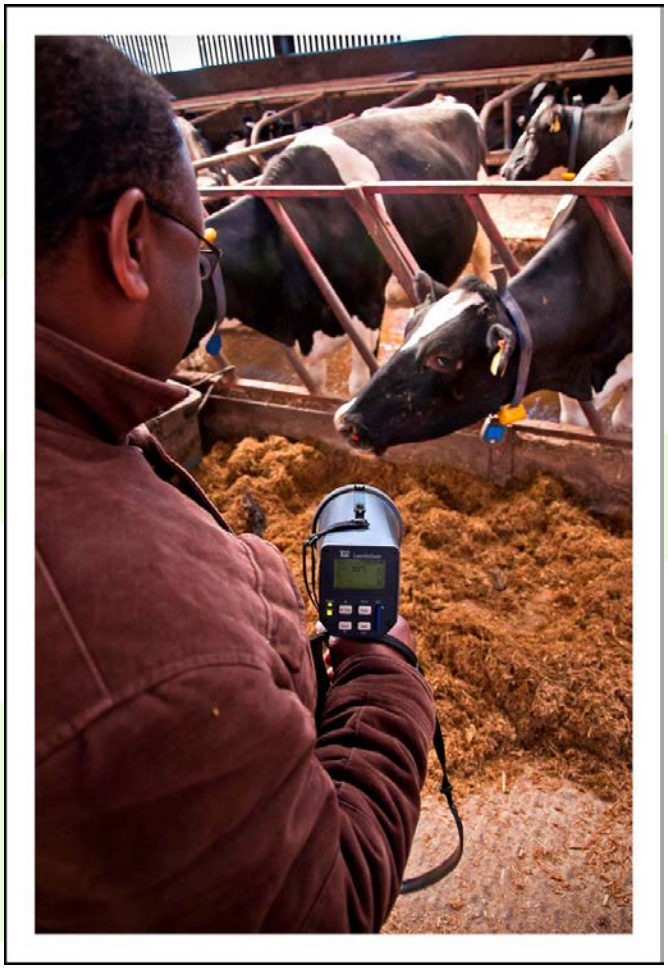
Estimation of methane



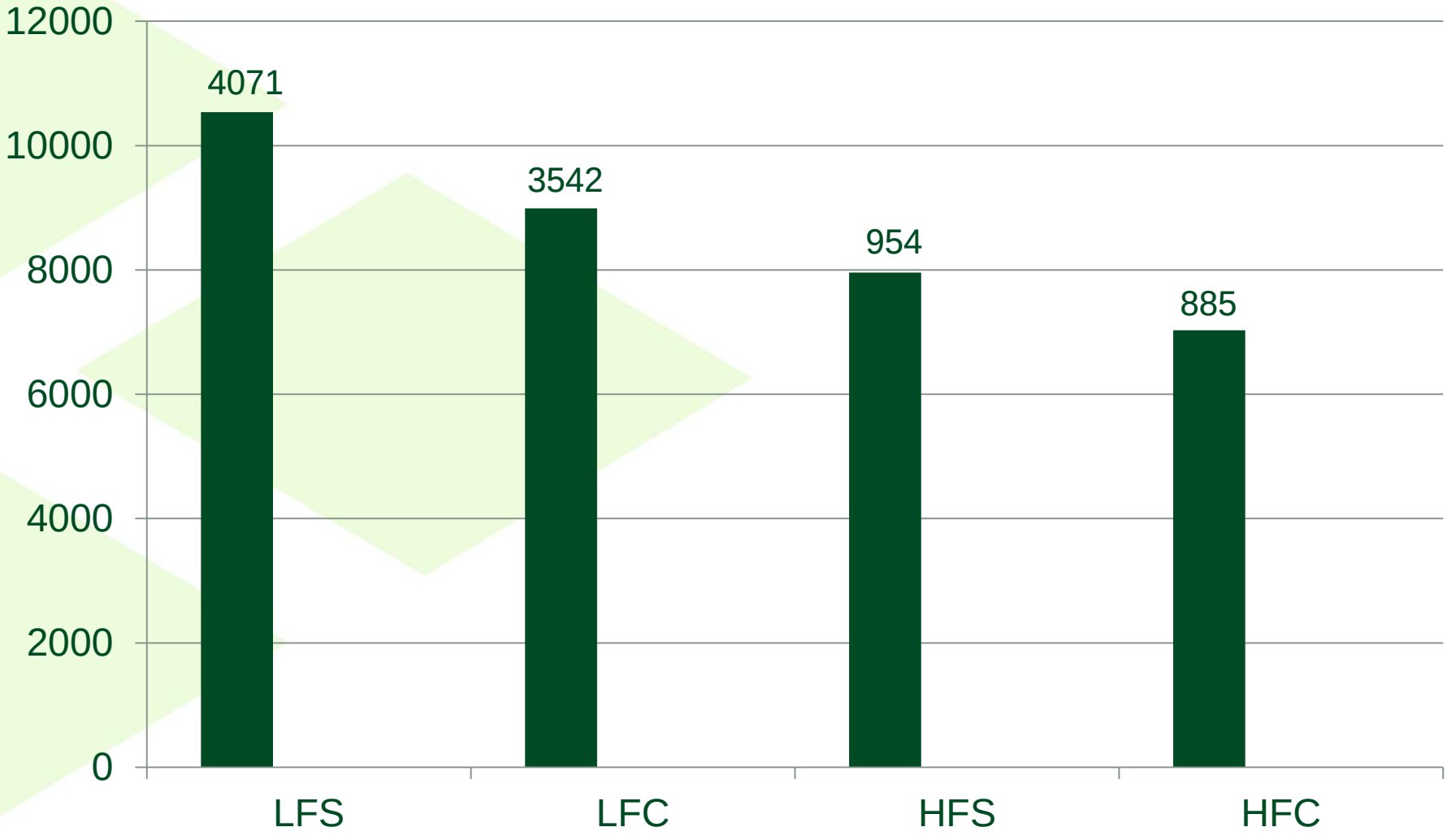
- Equations:

CH_4 (MJ/d) =

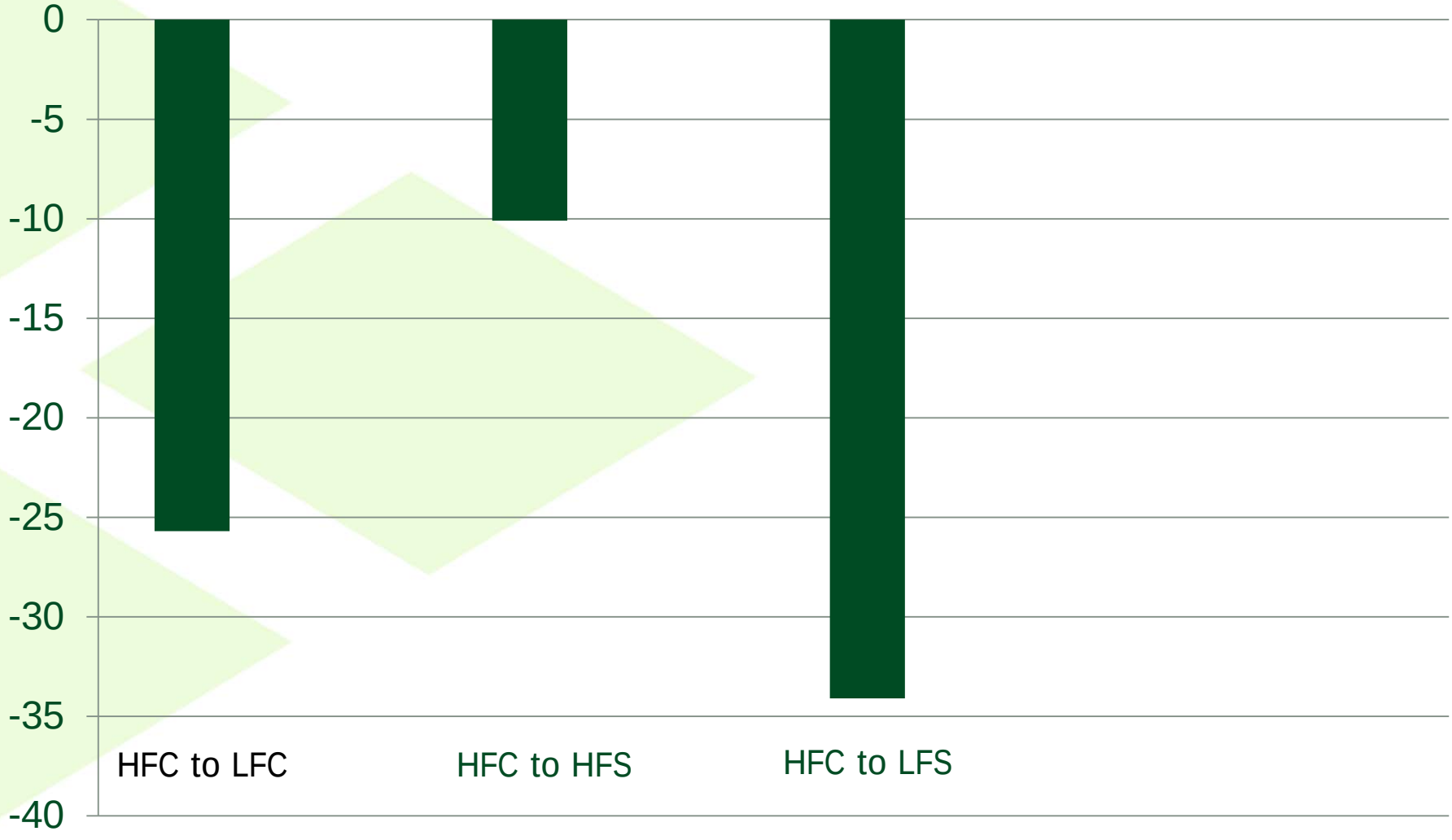
8.25 +0.07 x ME intake(MJ/d)

(Mills *et al*. 2003)

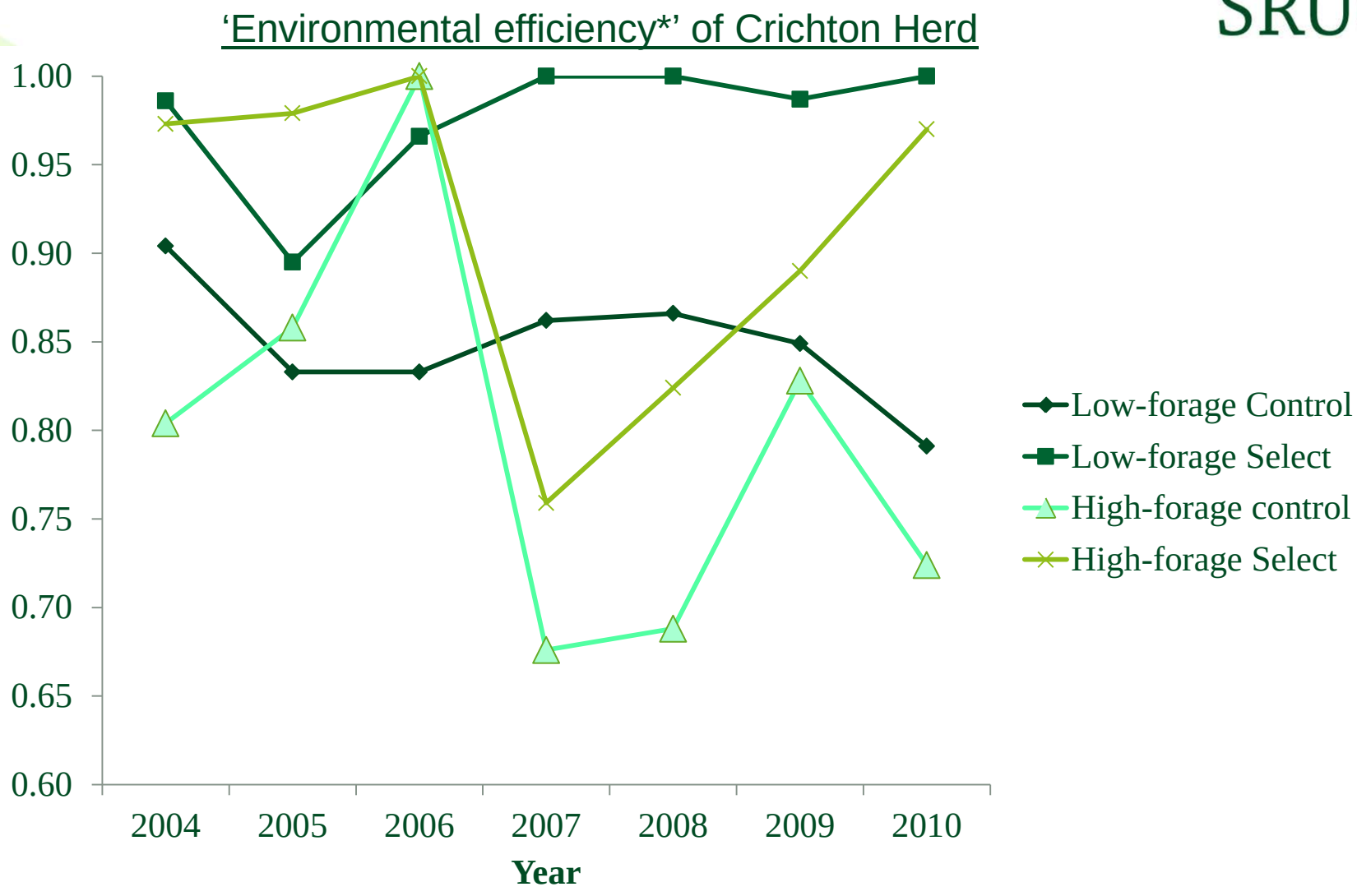
Milk sales (l/cow/year) and concentrate fed (kg/cow/year)



% reduction in enteric methane output by changing systems

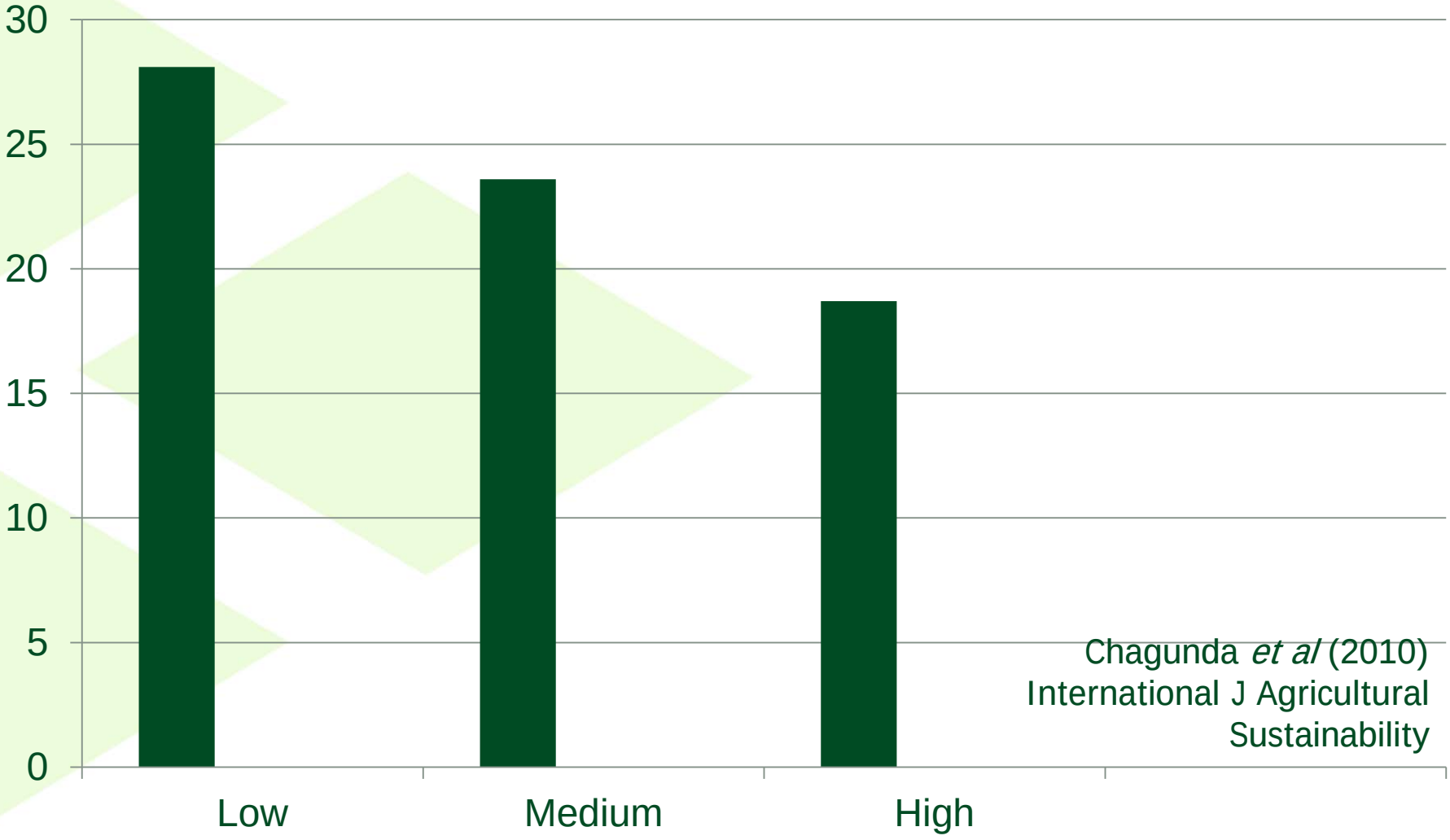


Understand change



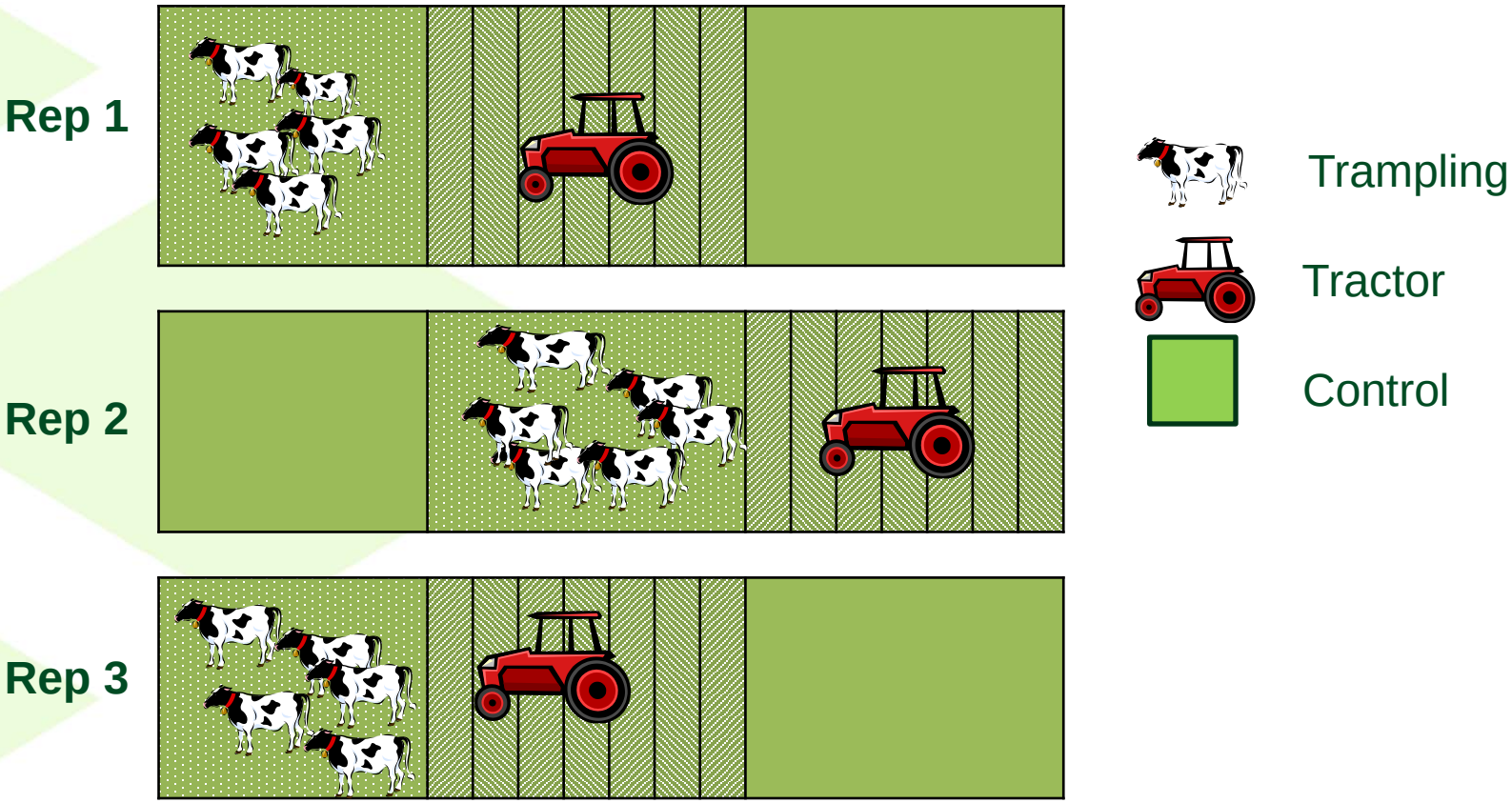
* CO2 and N surplus – preliminary output of Capacity Building Project – WP4.2: Low C Rural Economy

Estimates enteric methane (g/kg milk) from different silage qualities



Compaction

Main Treatments of the Compaction Experiment



Each treatment area is 20m x 24m

Trampling Treatment

Heifers (12) introduced into each trampling area for 1 hour on two separate occasions – one week apart.

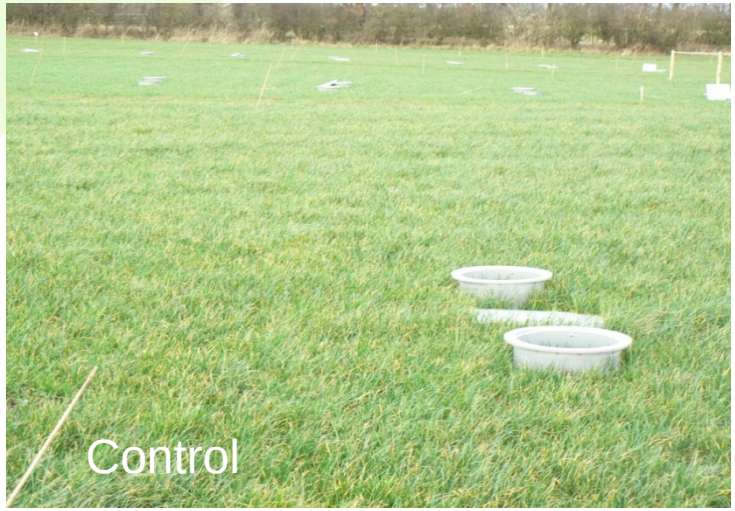
Tractor Treatment

Used a tractor with weight on the rear (Total weight 10,200kg).

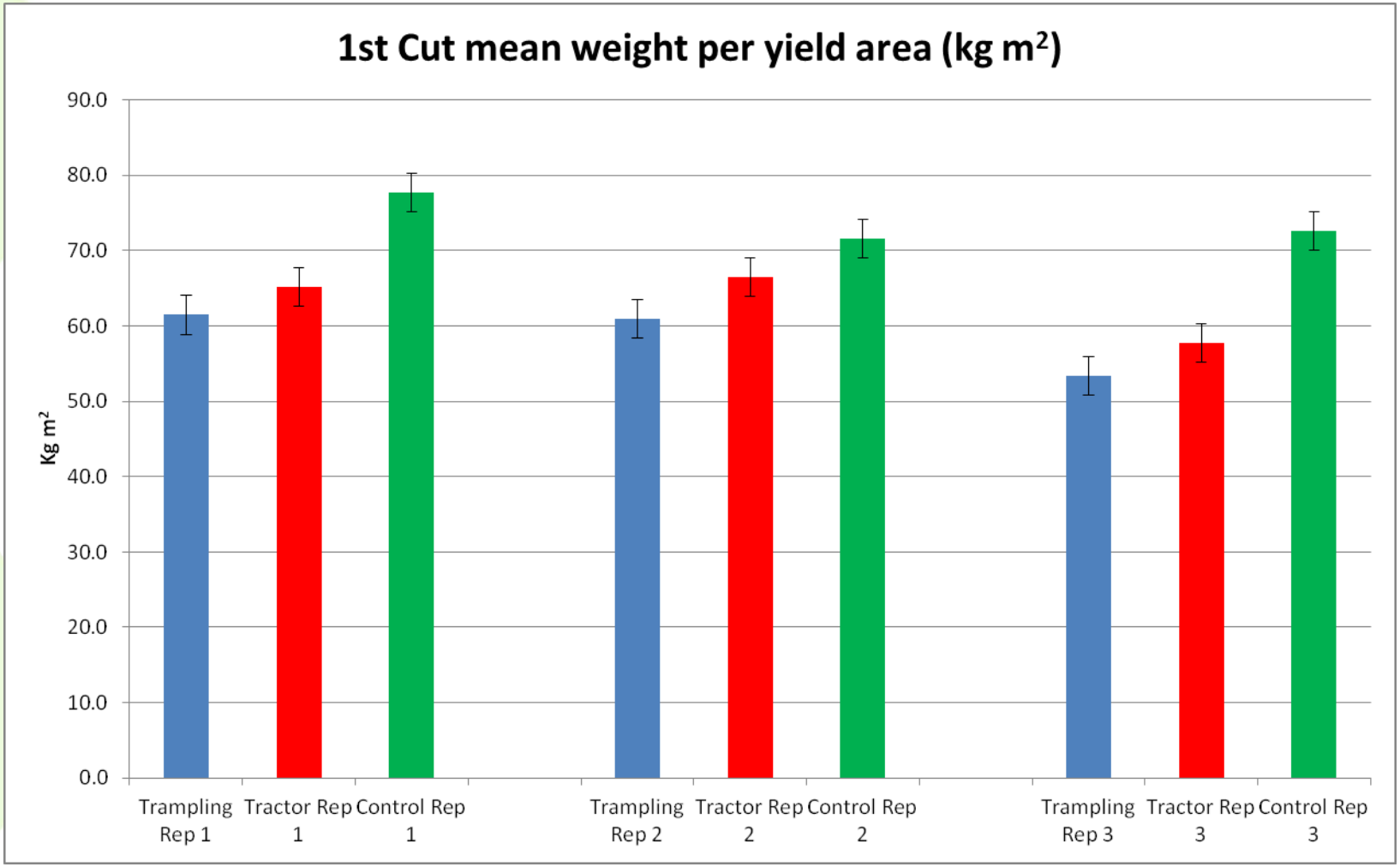
Driven over the compaction area once on two separate occasions - one week apart.

Tractor should affect both the surface of the soil and at depth

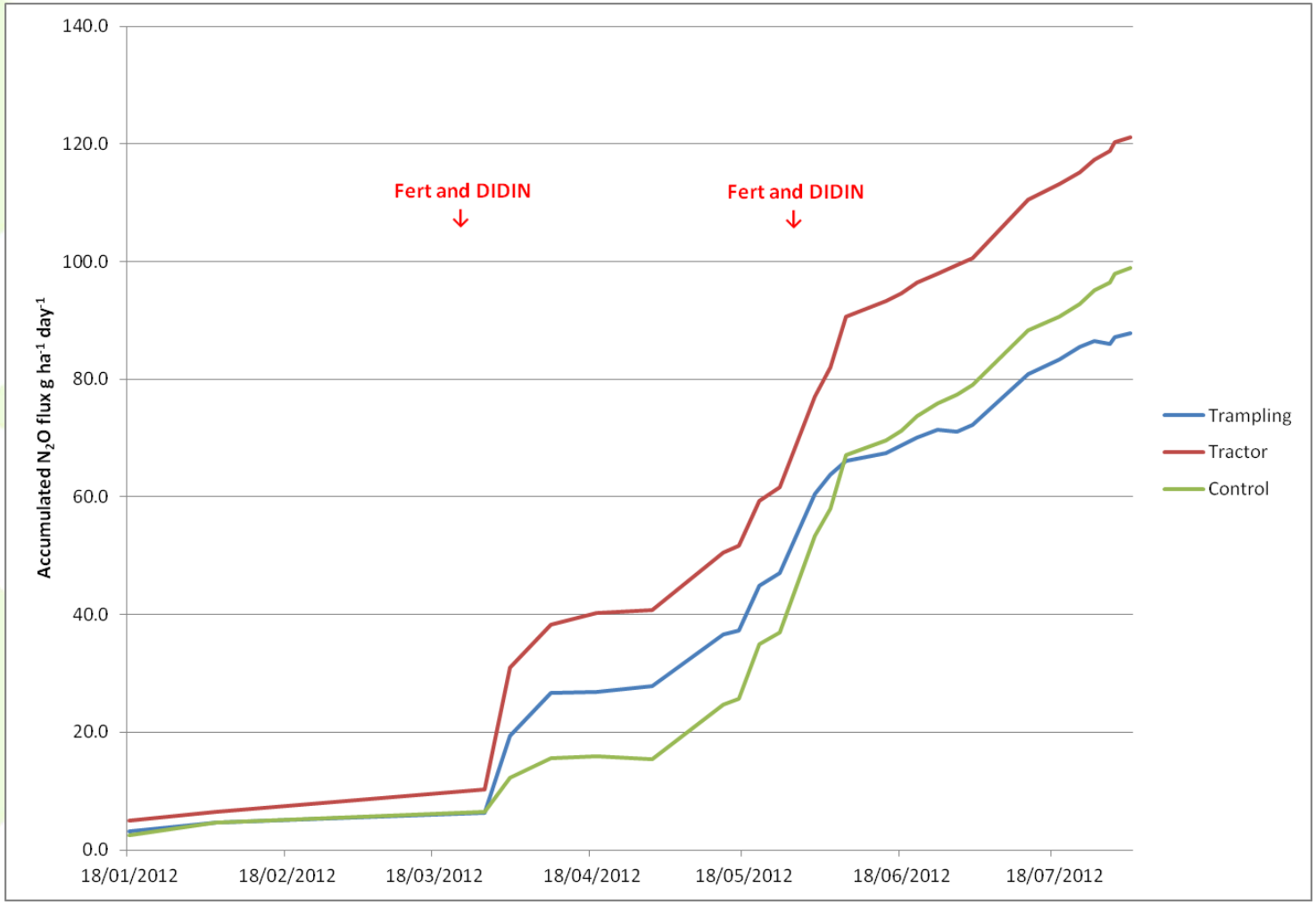
Treatment Effects



Compaction Results – 1st Cut



Accumulated N_2O Emissions



Acknowledgements

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- Scottish Government