

Harper Adams University

Positively sustainable – staying resilient in the current climate



Prof. Jude L. Capper

24th November 2021

Source: Dr. Jude L. Capper, 2021



When I was 15, I was a vegan



Prof. Jude Capper () @bovidiva

Harper Adams University



Prof. Jude Capper () @bovidiva





COM

What do I care about?



Instagram



△ bovidiva ~





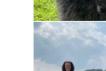


916

Following













1,137

Followers

Mum * Breast cancer survivor (2x) * Runner * Rugby * Livestock Sustainability Consultant * Professor of Sustainable Beef and Sheep at HAU *

1,677

Posts



Source: Created by Dr. Jude L. Capper, 2021.









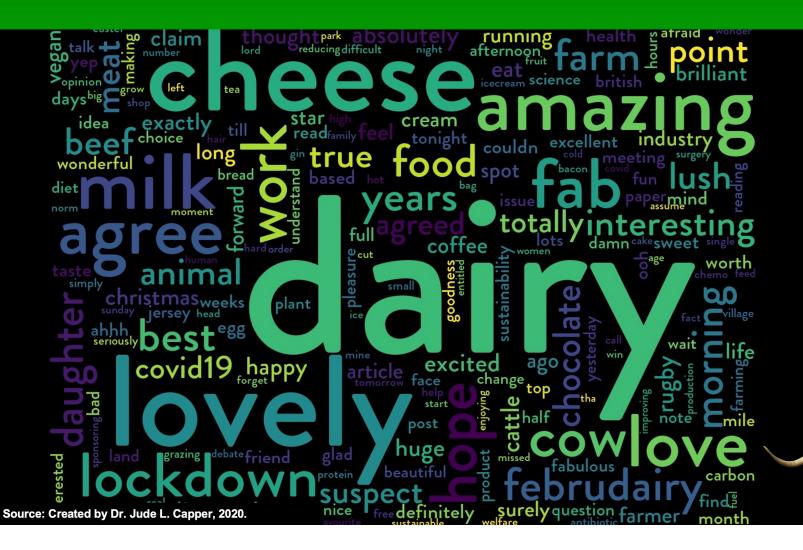




Prof. Jude Cappel **@**bovidiva

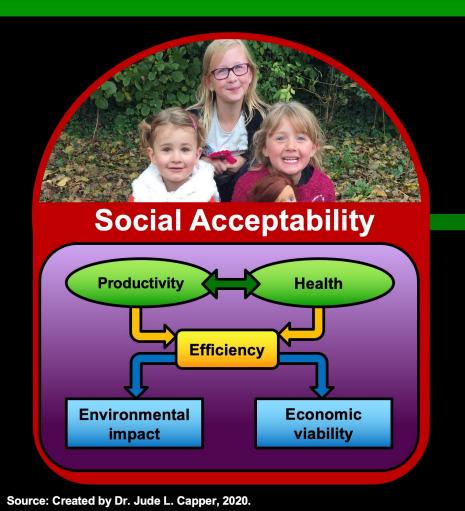


What do I care about?





Social acceptability and consumer trust are vital for sustainable livestock production







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Market share for plant-based meat/dairy alternatives is growing

Tesco sets 300% sales target for plantbased alternatives to meat

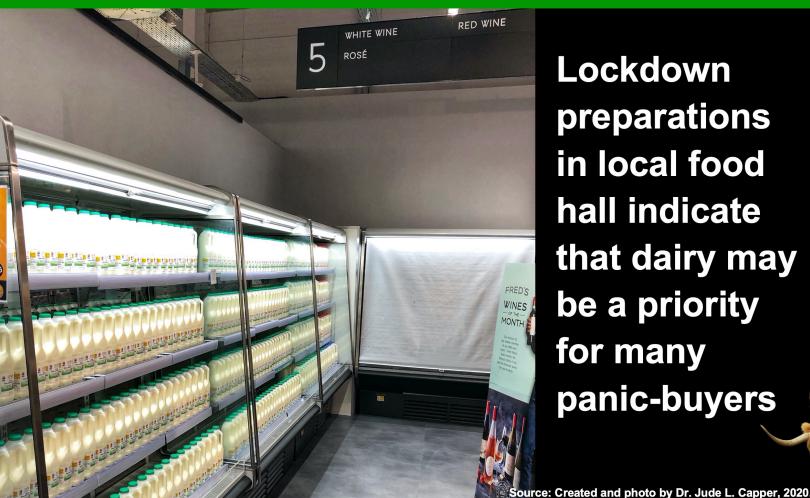
In UK first, supermarket's five-year commitment aims to offer more sustainable options



A 300% sales target is impressive... yet the magnitude of the results depends on the (2018) baseline

Source: Created by Dr. Jude L. Capper, 2020. Screenshot from: The Guardian (2020). https://www.theguardian.com/business/2020/sep/29/tesco-sets-300-per-cent-sales-target-for-plant-based-alternatives-to-meat

Is the rise in plant-based food sales related to consumer demand?



Lockdown preparations in local food hall indicate that dairy may be a priority for many panic-buyers









Do 582,538 Veganuary participants amount to more than a hill of beans?

JOIN THE NEW YEAR'S REVOLUTION

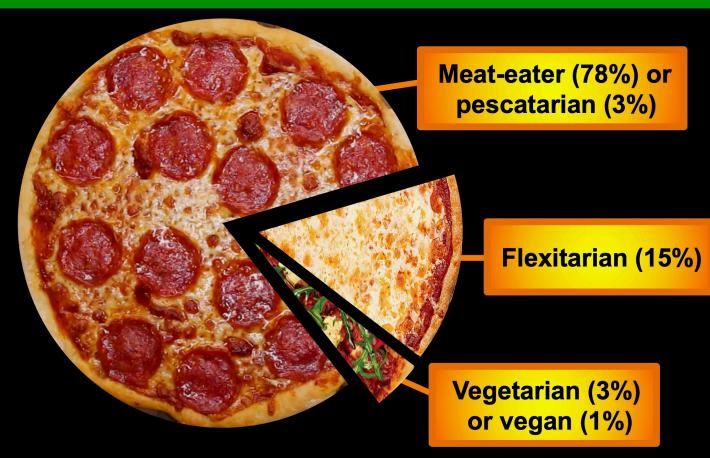
- Slightly smaller than the population of Sheffield
- If all participants were UK-based they would comprise <1% of the UK population
- Average of 2,787 per participating country
- 62% of participants already vegan, vegetarian or pescatarian



Source: Created by Dr. Jude L. Capper, 2021. Information from: https://veganuary.com/



The future probably isn't vegan, but it may be flexitarian?





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Source: Created by Dr. Jude L. Capper, 2020. Data from: YouGov (2019) Is the future of food flexitarian? https://yougov.co.uk/topics/resources/articles-reports/2019/03/18/future-food-flexitarian Question: "Which, if any, of these best describes your usual eating habits?" Results adjusted for people who answered "don't know" (3%) or "other" (3%).



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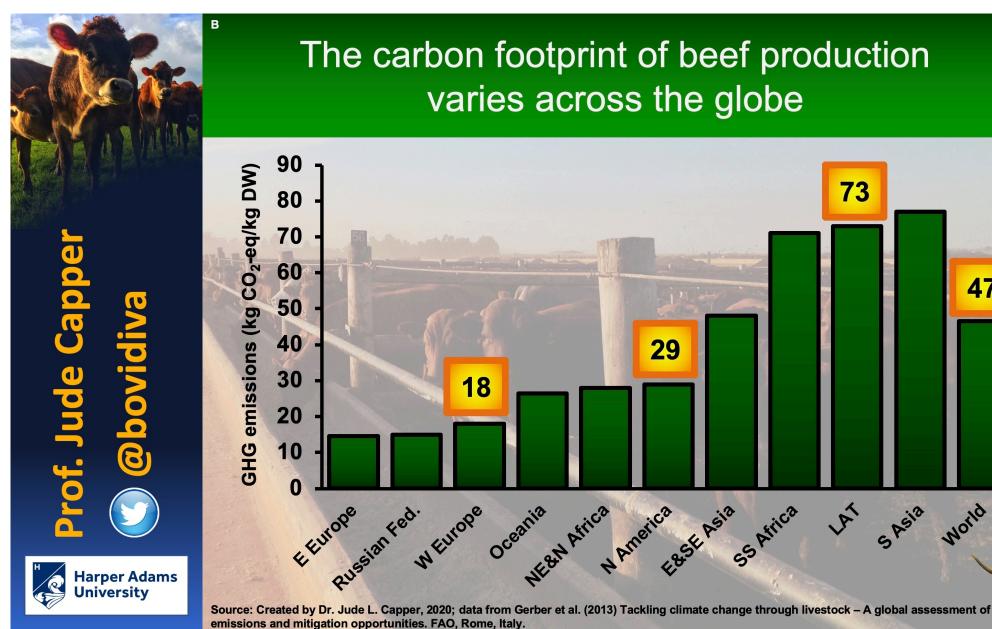
Guilt is a primary motivator for people considering going vegetarian or vegan

"I sometimes feel guilty when consuming meat and dairy products"

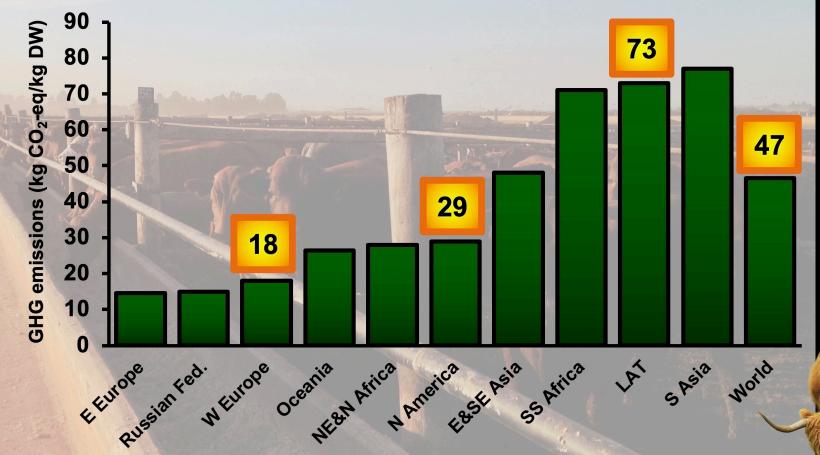
and flexitarians
thinking of giving up
meat said "yes"
compared to 25% of
national population



Source: Created by Dr. Jude L. Capper, 2020. Information from: YouGov (2019) Is the future of food flexitarian? https://yougov.co.uk/topics/resources/articles-reports/2019/03/18/future-food-flexitarian



The carbon footprint of beef production varies across the globe





New CREDS report puts transport, energy and food choices into context

Top 10 options for reducing your carbon footprint Live car-free 1.95 2 Battery electric vehicle 1.68 One less flight (long-haul return) 1.6 Renewable electricity 4 0.98 Public transport 0.895 Refurbishment and renovation 6 0.8 Vegan diet 0.795 8 Heat pump 0.65 Improved cooking equipment 9 18° 0.64 Renewable-based heating 10

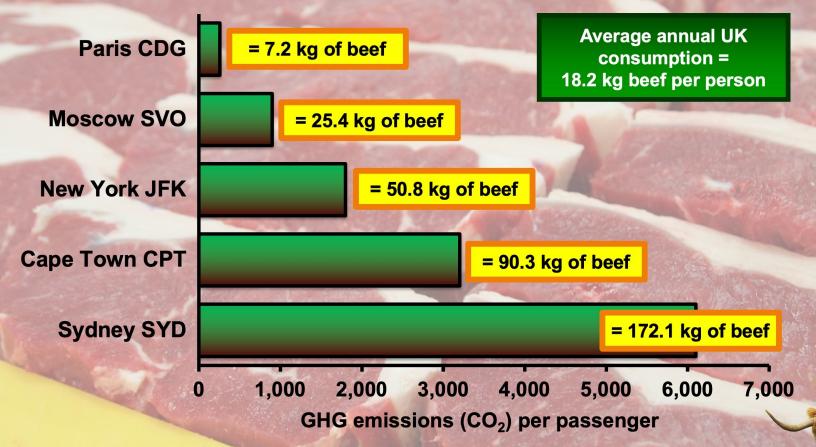


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Source: Created by Dr. Jude L. Capper, 2020. . Infographic adapted from Centre for Research into Energy Demand Solutions (2020). Available at: https://twitter.com/CREDS_UK/status/1262984570175176704?s=20



International flights emit considerable quantities of carbon compared to beef production



Source: Created by Dr. Jude L. Capper, 2020. Calculations based on GHG emissions flight data from: https://co2.myclimate.org/en/flight_calculators/new, and on a carbon footprint per kg of boneless beef of 35.5 kg CO2-eq (under GWP100) from AHDB: http://beefandlamb.ahdb.org.uk/wp-content/uploads/2013/05/p_cp_down_to_earth300112.pdf



Can we grow human food crops everywhere?





Prof. Jude Capper (2) @bovidiva



65% of UK land is not suitable for growing arable crops



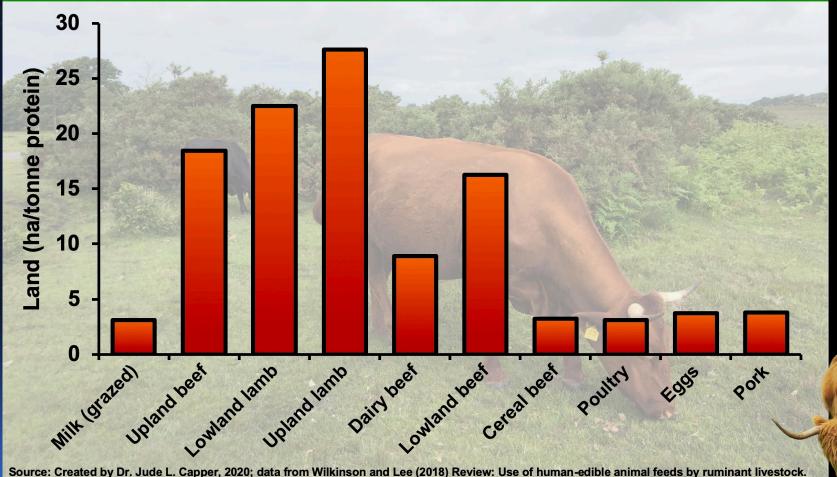
Source: Created by Dr. Jude L. Capper, 2020. Grazing land includes temporary grass on arable land (6% of total), land used for outdoor pigs or non-agricultural purposes not shown (1.7% of total). Data from DEFRA. 2019. Farming statistics - provisional crop areas, yields and livestock populations at 1 June 2019 – United Kingdom.

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment data/file/837834/structure-jun2019prov-UK-10oct19.pdf



Animal.

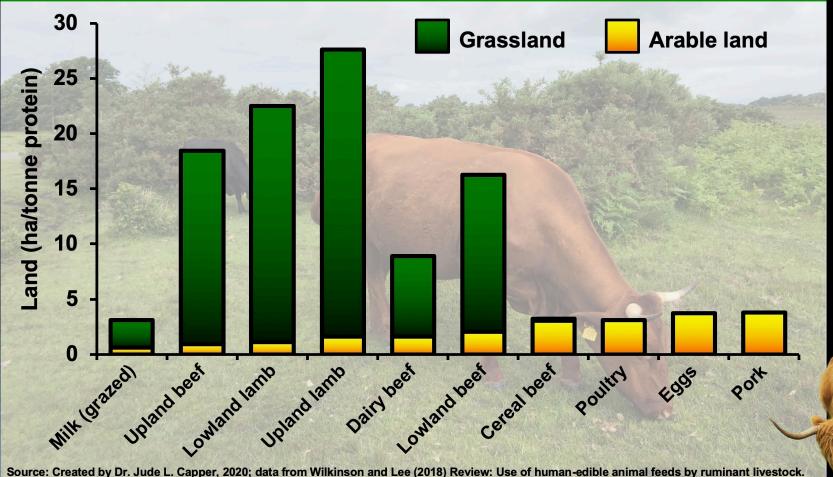
Livestock systems vary widely in land use



rof. Jude Cappe **Harper Adams** University

Animal.

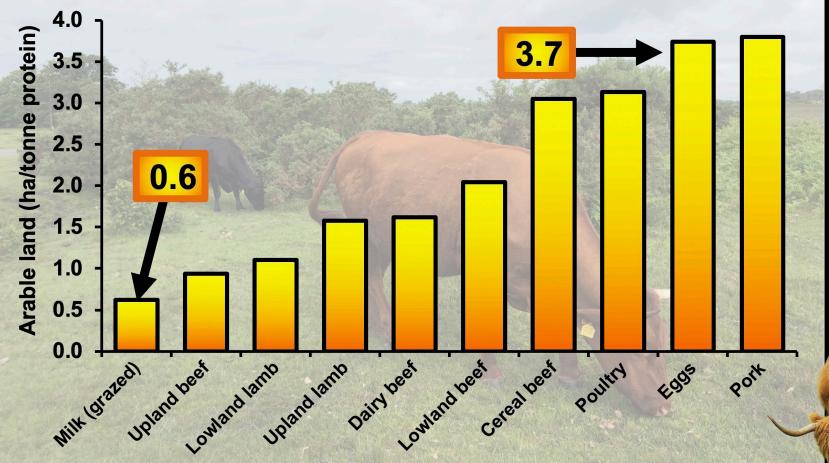
Livestock systems vary widely in arable and grassland use



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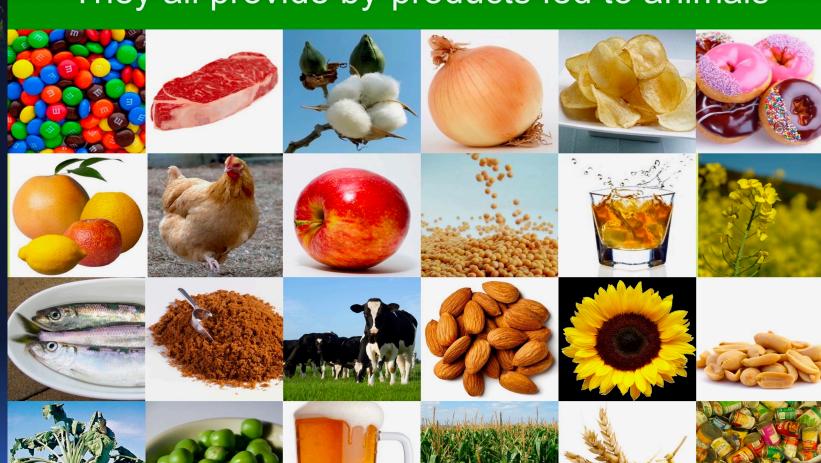
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Livestock systems vary widely in arable land use



Source: Created by Dr. Jude L. Capper, 2020; data from Wilkinson and Lee (2018) Review: Use of human-edible animal feeds by ruminant livestock. Animal.

What do these industries have in common? They all provide by-products fed to animals

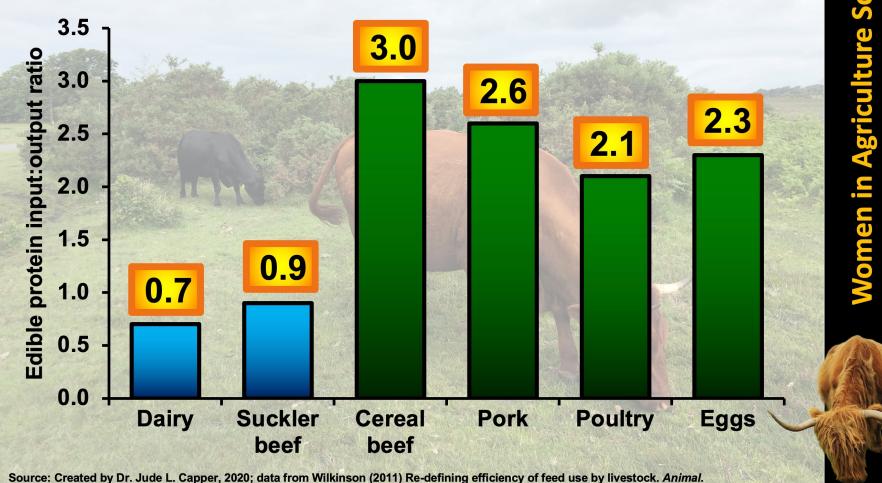








Grazing cattle systems produce more humanedible protein than they consume





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5 easy tips for positive communication

Share your values

Stay positive, polite and personal

Keep it short, simple and see-through

Focus on the important

Know when to walk away

Source: Created by Dr. Jude L. Capper, 2019. Adapted from: Capper and Yancey. 2015. Communicating Animal Science to the General Public. *Animal Frontiers*.



Share your values – in a positive manner





Phil Nash @PhilNash2

Replying to @CallananDarragh @Bovidiva and 6 others

We nurture our cows, give them the best food, bedding and comfort in order that they're free of stress, fear and discomfort. Regardless of what you feel motivates us, the vast majority of Farmers do it because they love their animals (more than they love their family!)

2:26 PM - 30 Jan 2018

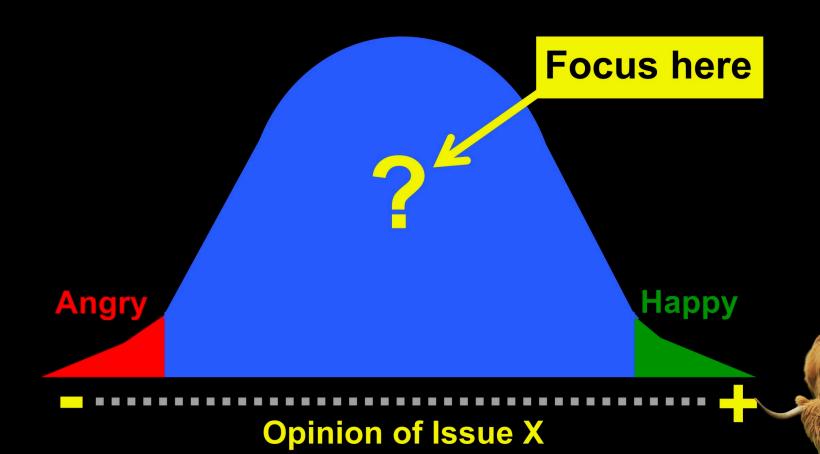
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Source: Created by Dr. Jude L. Capper, 2019. Screenshot from Twitter.com



СОМ

We need to communicate with consumers who don't yet have fixed opinions of agriculture



Source: Created by Dr. Jude L. Capper, 2017



Know when to walk away





Phillectual

@phillectual

@Bovidiva Why would someone who had breast cancer consume #dairy? WTF? Don't be shocked when the cancer comes back, lol.

We got the science, more and more people wake up every day, your psychopathic industry is slowly dying - and we can't wait for it to be gone. Go #vegan.

8:33 PM - 28 Jan 2018



Source: Created by Dr. Jude L. Capper, 2021. Screenshot from Twitter.com





Having a social media presence isn't all fun and games...





Prof. Jude Capper () @bovidiva



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You don't have be the biggest, you do need to do your best





Prof. Jude Cappel



Thank you!

jcapper@harper-adams.ac.uk http://bovidiva.com/presentationlinks





Source: Created by Dr. Jude L. Capper, 2020. Cartoon from: http://snipurl.com/methanecartoon