Pwyllgor Newid Hinsawdd, yr Amgylchedd a Seilwaith /
Climate Change, Environment and Infrastructure Committee
Blaenoriaethau ar gyfer y Chweched Senedd / Priorities for the Sixth Senedd
PR35
Ymateb gan Hybu Cig Cymru / Evidence from Hybu Cig Cymru

Hybu Cig Cymru - Meat Promotion Wales (HCC) is the statutory industry-led levy organisation responsible for the development, promotion and marketing of Welsh lamb, beef and pork. It undertakes promotional campaigns at home and abroad, is involved in research and development which benefits the efficiency and sustainability of the whole red meat supply chain, as well as collating and analysing market intelligence.

HCC has been asked to submit views on the Committees main priorities regarding climate change, environment and infrastructure for the Sixth Senedd (2021-2026).

The agricultural sector in Wales provides vital economic activity and employment in rural areas which supports rural community cohesion and provides cultural and wellbeing benefits. With agricultural production accounting for nearly 90 percent of the landuse in Wales it also therefore contributes to the wider management of Wales' natural resources and climate change action. It is therefore essential that priorities relating to climate change, environment and infrastructure fully incorporate the priorities of the Welsh agricultural sector to ensure that policies introduced are supportive of retaining a vibrant Welsh agricultural industry.

HCC suggests the Committee pay particular attention to the following.

The 'Welsh Way'

In late 2020, working with scientists in Bangor University, in collaboration with the University of Limerick, HCC published a document on Welsh meat production, its climate impact and potential mitigation activities – *The Welsh Way.*[1] This document places Welsh livestock production in its global context, uses the latest methodology to measure emissions and carbon sequestration on beef and sheep farms, identifies where further improvements can be made, and articulates a vision that Wales has the potential to be a global leader in sustainable meat production.

The document highlights that an overly-simplistic approach to policy in the area of climate change, diet, land use and global food security risks having negative consequences. It concludes that recognition should be made that production systems in Wales are vastly different from the damaging and intensive farming practices that are employed in other parts of the world, and that Welsh livestock farming has an opportunity to be part of the solution to climate change. This

[1] https://meatpromotion.wales/en/industry-resources/environment

conclusion has since been amplified by work at Cambridge University led by Professor Donald Broom.[2]

By taking advantage of its natural advantages, the 'Welsh Way' of producing lamb and beef can be a global exemplar of a sustainable, low-emissions system. The Welsh sheep and beef sectors produce quality food on land which is largely unsuitable for other productive purposes. This is achieved through non-intensive systems which depend on fewer additional imported inputs.

There are many practical and economic ways to achieve net zero emissions from agriculture while maintaining current levels of food production. Practical on-farm techniques such as improved animal health and welfare, increased use of breeding animals with high genetic potential and better use and management of grassland and forage can all lower the carbon footprint that is associated with agriculture and food production in Wales.

Livestock agriculture can also contribute positively to carbon sequestration, soil regeneration and increased biodiversity; and have positive benefits in terms of soil health and biodiversity.

Sequestration

Agriculture is one of the very few industries that has the ability to sequester carbon. This can be maximised, and production maintained, through well managed soils and efficient crop and plant growing cycles. This when combined with the natural and managed trees and hedgerows that can be seen in rural areas can provide a valuable resource that can sequester and store additional carbon.

There is however a need for sequestration on agricultural land to be given the same focus as emissions, as it plays a notable part in the carbon balance of farms. Within *The Welsh Way,* research was undertaken on the carbon footprint of a cross-section of Welsh beef and sheep farms, which included a comprehensive approach to include emissions and sequestration. This research utilised the latest and more nuanced methodologies and suggested that the climate impact of sheep and beef farming in Wales is appreciably less than was previously thought.

The sequestration ability of trees and woodlands is well documented, however one of Wales' most natural and abundant resources – soils – has been largely overlooked as a carbon sink. Given that the overwhelming proportion of land in Wales is managed for agricultural purposes, this puts the sector in a really important position: soils could be a notable source or sink of carbon, depending on how they are managed.

[2] D Broom. Biological Reviews. A method for assessing sustainability, with beef production as an example. 06 May 2021.

Relative impact of greenhouse gases

During the past two years, new scientific research has become more widely accepted which reassesses the relative impact of different greenhouse gases. Based on pioneering work at the University of Oxford, with contributions by scholars at Cranfield University, the University of California and elsewhere, the work particularly reassesses the impact of methane.[3]

The research concludes that methane's life span in the upper atmosphere is 10-15 years, in contrast to gases such as carbon dioxide which accumulate for centuries. As methane is the most common gas emitted by livestock agriculture (methane accounted for nearly 50 percent of the associated greenhouse gases on the farms carbon audited within *The Welsh Way*) and ruminant wildlife, this research has an impact for how the climate impact of livestock should be calculated and viewed.

Policy regarding agriculture and climate change should therefore take into account new research on the relative impact of different greenhouse gases.

This research has been embedded in the new IPCC '*Climate Change 2021'* report, concluding that they offer a more robust way of determining Nationally Determined Contributions to reducing greenhouse gases.[4]

Land use changes

Radical changes in land-use do not offer the most effective way to maximise rural Wales' contribution to mitigating climate change. Maintaining a critical mass of livestock production helps ensure the economic and cultural sustainability of Wales. It also assists Wales – as a country which is ideally placed to produce high-quality food from marginal land using few additional inputs - in meeting its global food security obligations and its duty not to 'off-shore' its emissions to more vulnerable global regions.

Limited changes of land use, for instance through targeted forestation or renewable energy generation, have a role to play. However, such changes can also have a negative short-term and medium-term impact, so any such interventions need to be well researched and integrated within farm systems.

Carbon off-shoring

Given the dominance of grass production in Wales, there is a strong argument to retain productive livestock to meet the demands of the domestic UK population. Despite an increase in social and political factors exerting considerable influence on consumer purchasing, lamb and beef consumption levels across the UK are currently relatively static, with consumption in 2020 for sheepmeat and beef standing

[3] Myles Allen & Michelle Cain. University of Oxford. Climate metrics for ruminant livestock. 08 August 2018.

[4] Intergovernmental Panel on Climate Change. Climate Change 2021: The Physical Science Basis. 07 August 2021.

at 3.9 kg and 11.3 kg per capita, respectively (compared to 4.3 kg and 11.9 kg per capita in 2010).5

Any further decline of livestock production in the UK (and specifically Wales, which accounts for 11 per cent of the UK beef herd and 28 per cent of the UK sheep flock),[6] would therefore result in UK consumers' demands for red meat being met by additional imports. Increasing imports of red meat to meet UK consumer demand could undermine the UK's efforts to reduce greenhouse gases globally, as measurements of emissions of imported products are not taken into account in greenhouse gas emission calculations. There would remain, therefore, an invisible – and likely increased – carbon footprint from the emissions produced overseas to produce sheepmeat and beef for consumption in the UK.

The UK (and Wales) has one of the highest standards of animal welfare in the world. Switching agriculture away from meat production in Wales in effect transfers red meat production to other countries with potentially lower welfare standards. Policy that switches the supply of lamb and beef from a domestic source to potentially less sustainable systems overseas, to meet UK carbon emissions targets, is simply offshoring the emissions, demonstrating a disregard for global social responsibility.

A key conclusion of the UK Committee on Climate Change is that *"agricultural emissions should not be off-shored. Achieving emissions reduction should not be at the expense of producing less food in the UK and increasing imports. As the UK is a relatively low-greenhouse gas producer of ruminant meat, this risks exporting emissions abroad and increasing consumption emissions"*.[7]

Consumer nutrition

Red meat is naturally rich in protein, and the vitamins and minerals that it contains offer many health benefits. Studies show that red meat provides essential nutrients that help boost health and well-being, including vitamins A, B, and D, iron, magnesium, zinc, selenium and potassium. Furthermore, the types of iron and zinc found in red meat have better absorption than those found in any other dietary sources.[8]

The *National Diet and Nutrition Survey* shows that in young women, there is insufficient dietary intake of vitamins A and B2, calcium, iodine, iron, magnesium, potassium and zinc. These are all provided by red meat.[9] Also, people over sixty

---

[5] Organisation for Economic Co-operation and Development. Meat consumption. https://data.oecd.org/agroutput/meat-consumption.htm

[6] Department for Environment, Food and Rural Affairs (England), Environment and Rural Affairs (Northern Ireland), Welsh Government and Scottish Government. Agriculture in the United Kingdom 2019.

[7] Committee on Climate Change. Land use: Policies for a Net Zero UK. (2020).

[8] Hybu Cig Cymru Meat and Health based on the Meat Advisory Panel (now Food Advisory Board) nutritional factsheets. (2020).

[9] Professor Robert Pickard. Hybu Cig Cymru commissioned paper on meat in the diet. (2020).

years of age require higher levels of vitamin B12; a nutrient that is present in animal foods but not in vegetables.

The Scientific Advisory Committee on Nutrition advises a red meat intake of 70g per day. According to the UK Government's National Diet and Nutrition Survey, the average consumption of red meat is very close to this level. Therefore, there is no nutritional reason to encourage the population, as a whole, to eat less meat.