Cynulliad Cenedlaethol Cymru | National Assembly for Wales Y Pwyllgor Newid Hinsawdd, Amgylchedd a Materion Gwledig | Climate Change, Environment and Rural Affairs Committee Ailfeddwl am fwyd yng Nghymru | Rethinking food in Wales

RFW 37

Ymateb gan: Ymddiriedolaeth Bwyd Cynaliadwy

Evidence from : Sustainable Food Trust

Introduction

- 1 The Sustainable Food Trust (SFT) welcomes the consultation on Rethinking Food in Wales, which is extremely timely given the growing public interest in shifting towards more sustainable and healthy food systems, sourcing food more locally, and the challenges posed by climate change and Brexit.
- 2 The SFT was established by Patrick Holden in 2011 with the mission to accelerate the change to more sustainable food systems globally.

Recommendations

- The SFT's vision is that there should be a planned transition to food systems in Wales which operate within 'planetary boundaries' as described by Professor Johan Rockström and others from the Stockholm Resilience Institute in Sweden. In a recent talk on this theme, Rockström pointed out that we are already exceeding planetary boundaries in five areas: greenhouse gas (GHG) emissions, biodiversity loss, soil degradation, water use and nitrogen fertiliser use. Food and farming is either the most significant contributor, or a major contributor in each of these categories. Soil degradation and overuse of water are unlikely to be such major issues in Wales as they are in some parts of the UK, but they are major issues in many countries from which food is imported into Wales.
- 4 Addressing these and other related issues will require significant change, but this would allow Wales to provide leadership in developing farming systems which help to reduce agriculture's contribution to irreversible climate change, degraded public and environmental health and increasing food insecurity. In this response, we can only cover some of the key issues we feel need to be addressed to make this possible.
- Our key recommendation to the Welsh Assembly Government is for the development of a food systems change plan which prioritises the need to address each of these key areas, three of which relate to food production in Wales, all five of which relate to imported food consumed in Wales. This should be complimented by agricultural and economic policy measures which shift the best business case for food production towards an economic model where sustainable farming practices are at least as profitable as those which cause harm to the environment and public health.³
 - We are in favour of additional support for organic farmers, but this cannot be the prime focus since it is essential to move all farming in Wales in the direction of greater sustainability.
 - While there is increasing support for the concept that farmers should be paid for ecosystem services, we feel it is important to retain a post-Brexit equivalent of Pillar I support to enable food production in Wales to remain profitable, but to ensure that farmers receiving such support:
 - · maintain and increase soil organic matter,

- reduce or, ideally, avoid the use of nitrogen fertiliser and pesticides (e.g. by increasing their use of forage legumes and mixed farming practices,
- diversify their farming operations (wherever possible) in terms of enterprises, species and crop varieties to benefit wildlife and food system resilience,
- provide more food for local markets, and the Welsh population via public procurement.
- 6 Such a plan should be integrated into parallel plans in close collaboration with the relevant environment and health Ministers, since the beneficial impact of such a strategy would have dramatic and positive effect on the environment and public health in Wales, and on rural employment.

Climate Change

- The UK Government is committed to reducing GHG emissions by at least 80% below 1990 levels by 2050.⁴ Agricultural accounted for 13% of GHG emissions in Wales in 2014⁵ compared with 10% for agriculture as a whole in the UK in 2015.⁶ This is undoubtedly because livestock production, especially from grazing animals are a key source of methane and nitrous oxide emissions and grazing livestock make up a high proportion of Welsh agriculture due to the topography of the Welsh countryside which means that a high proportion Welsh farmland is grazed pasture. Ruminants are the only way to obtain human-edible food on land that is only suitable for grazing, and imported meat is generally associated with greater GHG emissions and environmental degradation than when produced in the UK.⁷
- 8 We, therefore recommend that the number of grazing livestock in Wales should not be reduced in any significant way and that any attempts to introduce technological solutions to limit methane emissions should be considered very carefully for fear that they could affect ruminant metabolism in unexpected ways and result in unforeseen problems for animal or human health.8
- 9 Our analysis is that widely quoted estimates, based on UN reports from 2006 and 2013 on the proportion of greenhouse gases coming from livestock overall and ruminants in particular are substantially distorted and not applicable to Wales where grass is the indigenous ground cover for much of the country. These estimates also fail to account for the significant amount of atmospheric carbon sequestered and stored in Welsh soil by grass, hedgerows and parkland trees. Additionally, they fail to take account of the soil methane sink which is greatest in undisturbed grassland soils and under trees, especially where no ammonium-based nitrogen fertilisers are used.
- 10 A recent major study has concluded that in contrast to previous claims, each kilo of protein produced from cattle and sheep uses significantly less human-edible food than each kilo of chicken or pork.¹⁰
- 11 However, our recommendation is that future taxpayer support should be structured in such a way that farmers are discouraged from over-stocking, encouraged to keep livestock in harmony with wildlife and encouraged to offset or reduce GHG emissions associated with livestock production by relying principally on grass, the natural food for ruminants and minimising nitrogen fertiliser use. One of the best ways to do this is to increase the use of forage legumes such as clover, birdsfoot trefoil, and lucerne. In addition to providing a free source of nitrogen fertility which avoids the emissions associated with the production, transport and application of nitrogen fertiliser, forage legumes also provide food for pollinating insects at a time of year when it is otherwise in very short supply.

Slaughterhouses

- 12 We recommend that the Welsh Government should undertake an analysis of the availability and regional cover provided by red meat abattoirs in Wales, with a view to adopting measures which help to ensure the survival of small local abattoirs and enable the establishment of new small abattoirs in farming regions currently without a local slaughterhouse.
- 13 The number of red meat slaughterhouses in the UK has declined from almost 2,000 in 1971 to 251 in July 2017 (FSA data). In Wales, the drop has been similar, from 58 in 1990 (Welsh Govt. data) to just 21 today (FSA data). This poses particular problems for producers marketing locally produced meat.¹¹ The sector "faces a continuing underlying problem of fluctuating and, at times, low profitability".¹² Some large slaughterhouses in Wales have benefitted from substantial EU grants and may have outcompeted some small abattoirs as a result. Maintaining a network of small local abattoirs is vitally important for those supplying organic, pasture-fed, indigenous breed and other speciality meats to local markets. Long transport distances for producers slaughtering only a few animals each week increase costs dramatically and are also bad for animal welfare and meat hygiene.

Size of Holdings

14 There has been a relentless loss of small farms across England and Wales in recent decades. In Wales, there are still about 18,000 holdings of less than 20 hectares. We feel all efforts should be made to retain, and if possible increase, the number of smallholdings in Wales by reviewing this sector carefully and considering what is needed to ensure its survival. These holdings play a vital role in supplying local food markets, in maintaining the unique and beautiful Welsh countryside and in Welsh rural life and culture generally. But it is also important to recognise that many people from urban communities crave opportunities to have access to land to tend livestock or grow food themselves, and where farms get larger in size and fewer in number such opportunities decrease exponentially because they are generally accompanied by increased mechanisation. Referred to variously as 'green care' and 'nature-based interventions for mental health', access to the land in unstressed traditional environments has been shown to have significant therapeutic benefits for mental health which in today's stressed societies affects a staggering quarter of the UK population every year¹⁵ and costs an estimated £100 billion. In the stage of the stage of the UK population every year¹⁵ and costs an estimated £100 billion.

Horticulture

- 15 We recommend that specific consideration and help should also be provided to encourage more horticulture in Wales, including on smallholdings. The new schools curriculum includes 'health and wellbeing and it should be an ambition to supply all Welsh schools, hospitals and other institutions with fruit and vegetable produced in Wales and to introduce all children to the pleasures of growing and cooking food themselves.
- 16 Only 0.08 per cent of agricultural land in Wales is in horticultural production.¹⁷ While Wales has the soils and climate to support a thriving horticultural sector, only one-fifth of the fruit and vegetables it consumes are home produced. Forty years ago, Wales had twice as much land producing horticultural crops.¹⁸ Small-scale horticultural production has suffered in particular. Once the backbone of the sector, market gardeners with less than 5 hectares of land have been excluded from the EU's Basic Payment Scheme and have thus faced unfair competition from subsidised larger scale producers, especially those in the East of England. A study by Coventry University and the Landworkers' Alliance, found that small-scale horticultural units using agroecological methods can be more productive per hectare than larger farms, especially

for crops which require a high level of husbandry and need harvesting by hand. ¹⁹ If grass fields were used for horticulture in rotation then returned to grass after a few years, average soil carbon levels could be maintained. ²⁰ Rotating horticultural crops with grass or arable crops also breaks the life cycle of pests and diseases and reduces the need for pesticides.

17 Horticulture in Wales is hindered by the problem of adding value due to the lack of adequate processing facilities in Wales and the need to transport all but locally marked produce to packhouses in England, most of them in Eastern England, with the produce often then returned for sale in Welsh supermarkets.

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/604350/2 015 Final Emissions statistics.pdf

¹ http://www.stockholmresilience.org/research/planetary-boundaries/planetary-boundaries/planetary-boundaries.html

² Rockström, J. and 28 others (2009) Planetary Boundaries: Exploring the Safe Operating Space for Humanity, *Ecology and Society* **14** (2) 32, available at https://www.ecologyandsociety.org/vol14/iss2/art32/

³ See the SFT's website on True cost accounting in food and farming systems http://sustainablefoodtrust.org/key-issues/true-cost-accounting/, this includes the proceedings of our conference on 'The True Cost of American Food' and videos of all the presentations from this and other conferences we have held on the same issue. A report on the true cost of food in the UK is due for publication in early November

⁴ Anon (2015) '2010 to 2015 government policy: greenhouse gas emissions, available at, <a href="https://www.gov.uk/government/publications/2010-to-2015-government-policy-greenhouse-gas-emissions/2010-to-2015-government-policy-gas-emissions/2010-to-2015-government-policy-gas-emissions/2010-to-2010-to-2010-to-2010-to-2010-to-2010-to-2010-to-2010-to-2010-to-2010-to-2010-to-2010-to-2010-to-2010-to-2010-to-2010-to-2010-to

⁵ Anon (2014) 'Research Note: Greenhouse Gas Emissions', Natural Resources Wales, available at https://naturalresources.wales/media/679462/national-assembly-for-wales-research-note-greenhouse-gas-emissions.pdf

⁶ Anon (2017) '2015 UK Greenhouse gas emissions, final figures' Department for Business, Energy and Industrial Strategy, available at

⁷ Audsley, E., Brander, M., Chatterton, J., Murphy-Bokern, D., Webster, C. and Williams, A. (2010), 'How low can we go? An assessment of greenhouse gas emissions from the UK food system and the scope for reduction by 2050, WWF and FCRN, available at, http://www.fcrn.org.uk/fcrn/publications/how-low-can-we-go

⁸ We have an unpublished analysis of this issue which is available on request.

⁹ Young, Richard (2017) 'The importance of grazing livestock for soil and food system resilience', in D'Silva, J. and Webster, J. (eds) (2017) 'The Meat Crisis: developing more sustainable and ethical production and consumption, second edition, pp93-114, Earthscan ¹⁰ Mottet, A., de Hann, C., Falcucci, A., Tempio, G., Opio, C and Gerber, P. (2017) 'Livestock: On our plates or eating at our table? A new analysis of the feed/food debate', *Global Food Security* **14**:1-8, Available at http://www.sciencedirect.com/science/article/pii/S2211912416300013

 $^{^{11}}$ Kennard, R. and Young, R. (1999) 'The threat to organic meat from increased inspection charges, Soil Association, available at

¹² Strategic Action Plan for the Welsh Red Meat Industry (2009) Welsh Government

¹³ Willis, Graeme (2017) 'Uncertain harvest: does the loss of farms matter? CPRE, available at https://www.cpre.org.uk/resources/farming-and-food/farming/item/4647-uncertain-harvest-does-the-loss-of-farms-matter

- ¹⁴ Armstrong, Edward (2016) 'The Farming Sector in Wales', National Assembly of Wales, http://www.assembly.wales/research documents/16-053-farming-sector-in-wales/16-053-web-english2.pdf
- ¹⁵ Anon (2016) 'A review of nature-based interventions for mental health care', Natural England, available at,
- http://publications.naturalengland.org.uk/publication/4513819616346112
- ¹⁶ NHS Confederation (2016) 'Independent Commission on adult mental healthcare report published'. Available at http://www.nhsconfed.org/news/2016/02/independent-commission-led-by-lord-nigel-crisp-and-supported-by-the-royal-college-of-psychiatrists
- ¹⁷ Anon (2017b) 'Horticulture in Wales', Farming Connect, available at https://businesswales.gov.wales/farmingconnect/sites/farming/files/horticulture in wales. pdf, accessed 14 September 2017
- ¹⁸ Anon. (undated) 'Agriculture and Food', iwa clickonwales.org/Wales factfile, available at http://www.iwa.wales/click/wp-content/uploads/16 Factfile Agriculture&food.pdf, accessed 14 September 2017
- ¹⁹ Laughton, R. A. (2017) 'Matter of Scale a study of the productivity, financial viability and multifunctional benefits of small farms (20 ha and less)', Landworkers' Alliance and Centre for Agroecology, Coventry University, available at,
- https://drive.google.com/file/d/0B5dw4mKBC3yEdzRIOHhNbkFwUFg1MWNycHNpZW5JaDBnWVNr/view
- ²⁰ Johnston, A.E., Poulton, P.R. and Coleman, K. (2009) 'Soil organic matter: Its importance in sustainable agriculture and carbon dioxide fluxes', Advances in Agronomy, **101**, pp1–57.