

Health and harmony: the future for food, farming and the environment in a Green Brexit

Command paper consultation response – Feedback

May 2018

About Feedback

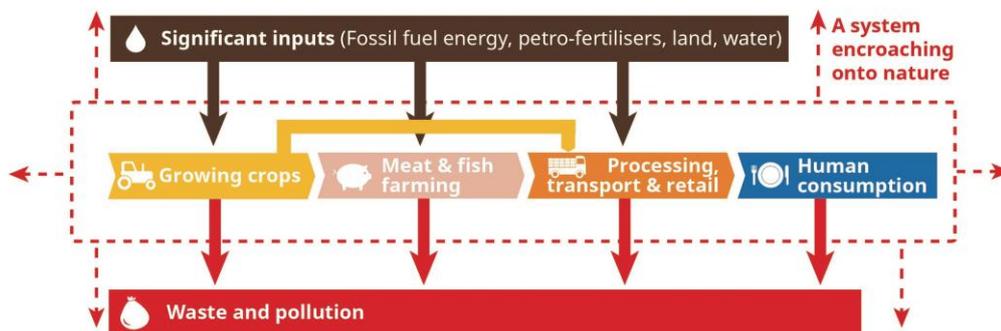
Feedback is a charity (number 1155064) which regenerates nature by reducing the demands placed on the planet by the food system. To do this, we challenge power, catalyse action and empower people to achieve positive change.

Introduction

Feedback welcomes the opportunity to respond to the Department for Environment, Food and Rural Affairs consultation on the future for food, farming, and the environment after Brexit and the Government’s decision to put environmental principles at the heart of their Agriculture Bill. Our response is based on our vision for a sustainable food system, by which we mean a food system which replenishes rather than degrades the natural environment, and which sustains people on a fair basis. To achieve this we need to address our current food system’s linearity, its excessive consumption of finite natural resources, and its reliance on overproduction and high levels of waste. The government’s Agriculture Bill represents an opportunity to move towards some of these goals.

Our current food system:

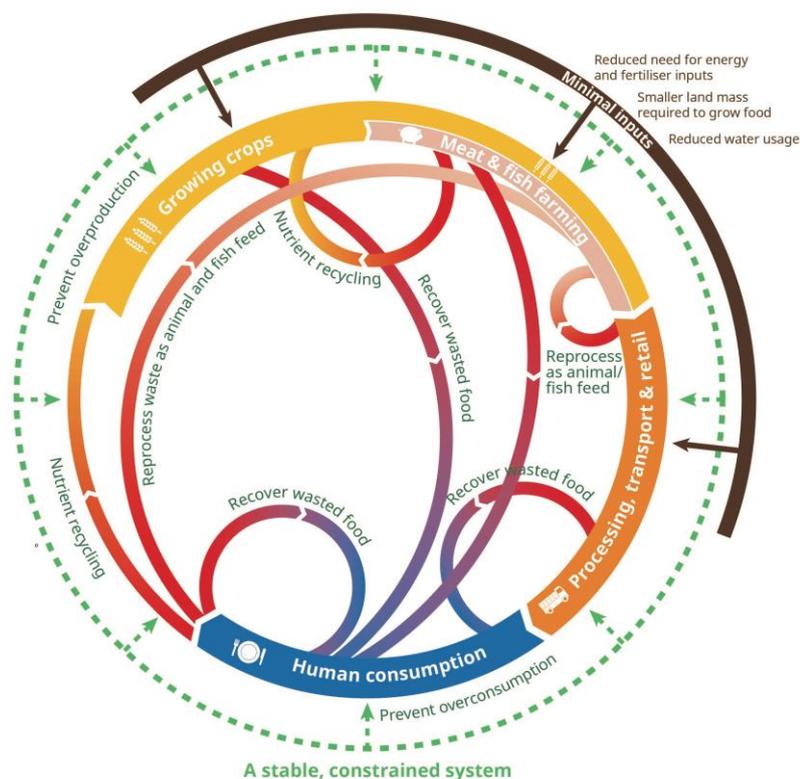
Feedback’s model of our current food system demonstrates its linearity: food moves in one direction, from production and processing, to consumption and disposal. At every level of this system, vast quantities of food go to waste: WRAP estimates UK food waste at around 10 million tonnes per year, post-farm gate¹. Because no one bears the costs of this waste, the system is also characterised by overproduction and by high levels of pollution, with significant costs to the UK’s ability to meet our climate change targets. Moreover, this overproduction leads to a growing food system, that is to say, one that uses ever growing land mass, driving significant biodiversity loss.



Feedback’s model for a sustainable food system:

To replace our linear food system, Feedback proposes a more circular model. This food system would require fewer resources to produce our food and lose far less in the form of waste. In fact, a defining principle of our circular food system is that food previously seen as ‘waste’ has value and can be used as a resource. Ideally this surplus food should be used for the purpose it was originally intended, as per the food use / utilisation hierarchy: usually this means that if food is fit for human consumption, it should feed people. If not, it should be repurposed to feed livestock and fish, and finally, fed to

soils through compost and manure. All three levels of the food system - humans, animals and soils - need to be fed and replenished to create a sustainable future. As what was formerly seen as 'waste' is reused, less waste pollution through landfill disposal is created, and less resources are needed to produce food in the first place. This stable, constrained system, requiring less land mass, since resources are more efficiently used within the food system, will leave more of nature free to flourish, as well as providing healthy and sustainable diets for all.



Our response to the consultation is based on the principles embodied by this model. While we welcome the vision of the Command Paper to contribute to the Government's manifesto commitment to be the first generation to leave the environment in a better state than we inherited it, we believe this strategy does not go far enough towards achieving this goal. Our response outlines how Feedback believes Defra could better achieve this goal, covering the following aspects of the Command Paper:

1. **Productivity, profitability and resilience:** We recommend that any approach to productivity incorporates a sustainability and human health definition of achieving productivity. We recommend that the government:
 - a. Measure farming productivity as nutritional value consumed by acre, rather than tonnage or profit by acre.
 - b. Increase productivity by addressing food waste, particularly at farm-level: measure farm-level waste and set binding targets to meet Sustainable Development Goal 12.3 to halve food waste from farm to fork.
 - c. Reduce feed costs for pigs and chickens and revalorise food surpluses which are no longer edible by humans by lifting the ban on feeding meat-containing catering waste and other food waste to omnivore animals.
2. **Public money for public goods:** We support a public money for public goods approach which recognises the value of environmental protection. However, we recommend that the government:
 - a. Recognise public health as a public good, therefore putting in place the mechanisms to favour some types of crops and animal farming over others, according to their nutritional value or other health benefits (such as avoidance of animal antibiotics)
 - b. Recognise the resilience and sustainability of the agricultural system as a public good, by supporting a diversity of farming systems, including agroecological systems, and a diversity of farming organisations, including cooperatives, small farms and community supported agriculture.
 - c. Treat the reduction of food waste, particularly on farms, as a public good.
3. **Guiding principles for land use in the UK – the Environmental Land Management scheme:** Land management must consider the uses of land in terms of what is grown, as well as how it is grown. We recommend that the government:

- a. Defines the purpose of land management as maximum nutritional value for minimal environmental impact or maximal environmental enhancement, in order to meet the outcomes in the 25 Year Environment Plan, the Clean Growth Strategy and the economy-wide decarbonisation ambitions as laid out in the Paris Agreement.
- b. Consider the global impacts of UK farming in payments to farmers, under the Environmental Land Management Scheme, in particular with regards to the sourcing of animal feed
- c. Uses the public money for public goods scheme to make horticulture more profitable for British farmers than growing ingredients for processed foods. The government should not extend payments to farmers who are not producing food. There should remain a clause in the agriculture bill that states that only active farmers will be beneficiaries of the Environmental Land Management Scheme.
- d. Introduce a Soil Act to ensure resilience of our local and national food system, with a baseline and binding targets.
- e. Introduce a Biodiversity Act, with a baseline and binding targets to improve biodiversity and wild spaces in the UK.
The latter two recommendations can be seen as the 'flip side' of sustainable agriculture: if the government is successful in its ambition to leave the environment in a better state than we inherited it, we should see improvements in England's soil and natural environment.

Additionally, two sector specific recommendations are as follows:

- f. Reintroduce a quota system for Sugar Beet production in the UK to ensure that sugar production does not exceed the World Health Organisation's Recommended Daily Intake of sugar for UK citizens.
 - g. Update the Anaerobic Digestion Strategy and action plan, including revisiting and addressing perverse incentives which undermine the food use hierarchy and incentivise the unsustainable growth of the AD industry.
4. **Risk management, resilience and fairness in the supply chain:** a fair food market which supports a wide variety of production and retail models will improve the resilience of our food system and reduce risk for producers.
- a. We continue to advocate the extension of the remit of the Groceries Code Adjudicator to cover indirect suppliers.
 - b. We recommend government require large food businesses to carry out mandatory public report of food waste data throughout their supply chains.
 - c. We recommend that the government consider how it can support and incentivise a more diverse and regionalised groceries retail market, with diverse business models and ownership structures
 - d. We recommend that public procurement of food and drink be made more accessible to smaller scale producers, by mandating the balanced scorecard approach in tenders, in order to support a diversity of production and supply models.
5. **International trade:** the government should not allow a narrow focus on consumer prices to undermine the environmental benefits it aims to incentivise through its public money for public goods schemes.
- a. Set parameters for our trade negotiators that uphold high standards for food and fish farming, in a way that is fully accountable and open to parliamentary scrutiny and review.
 - b. The UK should demand mandatory methods of production labelling for imported and domestic food products to drive up health, livestock, environment and labour standards.

1. Productivity – farming excellence and profitability

We welcome the government's support for increasing productivity. However, we would stress that this aim should encompass true productivity and not a narrow economic definition of 'productivity'. Sustainable productivity accounts for health of people and resources, now and in the future. The very narrow economic definition of 'productivity' adopted in this Command Paper prioritises high yields in the immediate term over high yields of healthy food in the longer term and is therefore incompatible with a sustainable food system as outlined above.

We propose that productivity should be recognised as nutritional value consumed by acreage and not tonnage produced by acreage. We recommend the government incentivises a diverse portfolio of food production based on sustainable and nutritious dietary guidelines such as the Barilla Centre's Double Pyramidⁱⁱ. Foods with lower greenhouse gas emissions (GHG) have been found to produce better human health outcomes: an Oxford research study examined the effect of a £2.72/ tonne carbon dioxide equivalents tax applied to every 100g of food with above average GHG emissions. The model showed that taxing ecologically harmful foods would prevent 7,700 deaths and reduce GHG emissions by 18,683 ktCO₂ e/year (and generate tax revenue of £2.02 billion)ⁱⁱⁱ. Taxation is one strategy the government

should consider to create a nutritious portfolio of agriculture across the UK and increase the true productivity of our land and soil.

Addressing food waste to maximise true productivity

Endemic levels of food waste at all stages of the supply chain is a major productivity and environmental challenge. The government should incentivise waste reduction ahead of increasing food production (e.g. through higher yielding crops) to meet future challenges. Recent research has highlighted that reducing food waste is the third most effective solution to fighting climate change, after refrigerant management and onshore wind turbines^{iv}.

A recent report by Feedback estimated UK farm-level food waste to be 10-16% of production^v or 2.5 million tonnes^{vi}, representing a lost produce value of £0.8 billion. The FAO estimates that almost 60% of food waste in Europe occurs before the consumer level – with 49% occurring at the farm and post-harvest level^{vii}. Food waste and overproduction exist in a cycle in which retailers' market power over producers and price volatility incentivise overproduction (see section 4). In turn overproduction generates food waste which exacerbates price volatility and reduces producer power. Incentivising overproduction is therefore not the answer to securing the livelihoods of UK farmers.

We recommend that the government should measure food waste occurring on farms and set targets to halve UK food waste from farm to fork by 2030. The UK's current voluntary food waste targets, the Courtauld Commitment, does not include the estimated 2.5 million tonnes of food waste occurring on farms and despite the low ambition of the target, (20% compared to the Sustainable Development Goal 12.3 of halving food waste by 2030) business participation so far has been patchy. Tesco have called for businesses to go beyond Courtauld and to meet 50% reductions farm to fork by 2030^{viii} but as other major retailers have not acted, Courtauld needs to be upgraded and strengthened. Setting a binding national target to halve UK food waste from farm to fork by 2030 would help to ensure ambitious participation from industry on a level playing field. Feedback supports WRAP's commitment to benchmarking pre-farm gate food waste by 2018, and recommends that the government moves ahead with this as well as publishing the results of an equivalent analysis to the household food waste analysis on a regular basis.

Surplus food as animal feed

We support the Government's ambition for a "more self-reliant agriculture industry" to meet demand for animal feed. In October 2017, feed costs in the UK made up 62% of total pork production costs, up from 59% in 2016^{ix}. In Japan, surplus food is turned into feed for omnivore non-ruminant animals in industrial food-to-feed recycling plants that deliver safe feed at half the cost of conventional feed.

Feedback calls for the Government to use the opportunity of leaving the European Union to lift the current ban on using catering waste and food surplus that may contain traces of meat from retail and manufacturing as feed for omnivorous non-ruminant livestock, such as pigs and chickens. The current ban on the feeding of safe, well-regulated and treated food waste to pigs has led to a reliance on expensive and environmentally damaging conventional feeds. We propose that this ban is replaced with robust legislation regulating the treatment of food waste not suitable for redistribution for human consumption in off-farm licensed processing facilities so that it can be safely fed to omnivorous non-ruminant farm animals. The following EU regulations would need to be reviewed when they are transposed into UK law, or updated directly in UK law post-Brexit:

- **Regulation (EC) 999/2001** which bans using animal protein in animal feed (specifically amendments 1923/2006 and 56/2013 which extend this ban to non-ruminant omnivores)
- **Regulation (EC) 1069/2009** and implementing Regulation (EC) 142/2011 which ban using kitchen left-overs and catering waste for feed

An expert seminar in 2017 with veterinary epidemiologists, microbiologists and pig nutritionists from the Universities of Leeds, Cambridge and Wageningen, APHA-DEFRA and an expert of the European Food Standards Agency FEEDAP committee discussed the safety implications of using food waste as animal feed. These experts agreed that **from a technical point of view it is possible to produce safe feed from food waste through heat treatment, potentially complemented with acidification (fermentation or adding lactic acid for example)**.^x The report emphasizes the importance of sound system design to prevent cross-contamination using biosecurity measures and proven logistical and Hazard Analysis and Critical Control Point measures for segregation in storage and transport such as zoning, one directional process flows and dedicated sealed storage.^x Based on the findings of the expert seminar, Feedback has concluded that "in the European context it will be necessary to limit the production of feed from surplus food to licensed treatment plants that are located at a sufficient distance from any farm premises."

Benefits of introducing safe, licensed food waste to animal feed processing:

- A 2018 study “found strong support (>75%) for the relegalisation of swill among both pig farmers and other stakeholders”, based on a survey of 82 pig farmers and 81 other agricultural stakeholders at a UK agricultural trade fair, which included many large industry players.
- There are huge global environmental benefits in terms of reducing the UK’s global land use footprint for crops grown for animal feed: calculations based on EU-wide data suggests that feeding meat-containing surplus to pigs could “reduce demand for up to 268,000 hectares of soybean production, which could “mitigate ca. 2.6 % of the forecast expansion of soybean, reducing pressure on high-biodiversity tropical biomes accordingly.”^{xii} Using food waste as animal feed scores better on 12 out of 14 environmental (e.g. eutrophication and eco-toxicity) and health (e.g. carcinogens) indicators compared to anaerobic digestion or composting^{xiii} (see table below^{xiii}). The calculations in the study were based on the current UK energy mix for the energy needed to render the food waste safe. If renewable energy was used, feed could potentially beat biogas and compost on all indicators.
- Savings on feed costs could be invested in maintaining and improving animal welfare standards and insulate farmers from the need to compromise on animal welfare to remain competitive. Adding a diversity of food waste based feeds, so long as these give optimal nutrition balanced out over time, may maintain homeostasis and reduce levels of stress – thus improving animal welfare and profitability^{xiv}.

Enabling farmers to invest in more hygienic, less crowded and higher welfare conditions for their pigs may reduce the levels of anti-biotics required on UK pig farms. Furthermore, the potential of fermented liquid feed, as an alternative to the use of growth promoting antibiotics has been well-researched and the increase in lactic acid bacteria has been found to “be an excellent strategy to achieve a reduction of enteropathogens such as *Salmonella* spp. And *E. Coli*,”

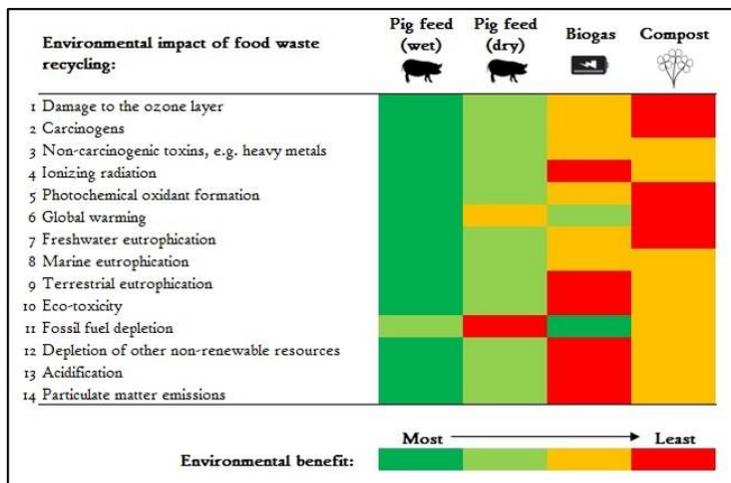


Figure showing animal feed scores better on 12 out of 14 environmental indicators. Data from Salemdeeb, Ramy, et al. (2016)^{xii}

Consultation question – Agricultural technology and research

“What are the priority research topics that industry and government should focus on?”

- I. g) Other (see below)
- II. e) Improving environmental performance, including soil health
- III. d) Managing resources sustainably, including agro-chemicals

Further research is needed by government and industry into the specific treatment and biosecurity requirements and the costs and benefits of food waste as an alternative source of pig feed:

- a. Model the most effective and energy-efficient combination of temperature, acidity, pressure and time to inactivate dangerous pathogens such as FMD and ASF.
- b. Build a pilot treatment facility to finetune pathogen inactivation and biosecurity measures to prevent cross-contamination and measurement of nutritional composition
- c. Building on earlier feasibility and life cycle costing analyses by REFRESH, and bearing in mind global feed crop commodity price hikes, develop a full cost- benefit analysis for farmers and the amount of resources that may be freed up to invest in animal welfare. This should include a cost-benefit analysis of investment in infrastructure for liquid feeding given the demonstrated improved performance resulting from fermented liquid feed and its role in strengthening “the stomach as the first line of defence against possible pathogenic infections by lowering the pH in the gastrointestinal tract thereby helping to exclude enteropathogens.”^{xv}
- d. Similar studies must be conducted for chicken feed.

2. Public money for public goods

We welcome the Government's public money for public goods approach and agree that the government should use these subsidies primarily for environmental protection. **However, we also recognise that any sustainable food system must have human health at its core:** as stated above, a food system that produces food along dietary guidelines will have lower emissions intensity. Similarly to any industry trying to 'green' itself, sustainability must determine key business decisions; without addressing the core footprint of our farming all payments for environmental public goods become meaningless. Public money for public goods must align what we grow with what is healthy for both the public and the planet (see our proposals under section 3).

Besides health, the Agriculture Bill should recognise the resilience of England's food system and current and future food security as public goods. Incentives that encourage higher productivity now but threaten our future productivity are not sustainable. Current food security can be supported by tackling supply chain food waste and using the full value of food within the food system by actively enforcing the food use hierarchy that is already in legislation. Future food security will depend on diversity of farming approaches, ensuring a mix of large- and small-scale, high tech and low tech methods. Monocultural, resource intense systems are a threat to our future food security, especially when crops produced are not of any real benefit to human health (see 'Focus on sugar', below).

Degraded topsoil holds less organic matter and microorganisms and less than half of the water than healthy soil in the same location^{xvi}. It takes from 500 to thousands of years to create an inch of topsoil. As the Secretary of State has pointed out, some soils in England have finite decades of fertility left^{xvii}. According to research compiled on behalf of Defra, soil degradation costs the economy of England and Wales £1.2 billion every year^{xviii}. Despite all this, there is no UK wide scheme to monitor changes to soil health. Recognising that future viability of farming rests first and foremost on healthy soils, and recognising the severe soil depletion and erosion occurring in some parts of the UK^{xix}, we call on the government to urgently adopt a Soil Act of Parliament, setting year on year targets for improvements in soil health (modelled on the Climate Change Act).

As part of incentivising resilience, we also believe that agroecological systems, especially agroforestry systems, should be recognised in their own right as public goods because of their provision of diverse nutrition, reduction in farm input costs and their scope for improved crop resilience under adverse weather conditions; trees, ditches, zero tillage and green manure all slow soil erosion, maintain topsoil and improve soil filtration, preventing crop failure during droughts while organic methods improve drought resistance via soil improvements.^{xix}

Support for agroecological and agroforestry systems should also encompass agricultural research and development, education, support to farmer organizations and cooperatives, farmer to farmer learning and assistance for small-scale farmers to join supply chains.^{xx} Similarly, public procurement systems, credit, and land tenure policies can be fully utilised within the agricultural bill to help farmers move towards low-external-input modes of production.

As reducing food waste will contribute to meeting the UK's climate change targets under the Paris Agreement, we recommend that food waste measurement and reduction, in particular on farms, be considered a public good.

Consultation questions – Public money for public goods:

Q: "Which of the environmental outcomes listed below do you consider to be the most important public goods that government should support?"

The following should be a priority but all need to be delivered by diversifying farm types to include more agroecology and organic farming systems:

1. (a) improved soil health
2. (e) climate change mitigation
3. (d) increased biodiversity

Q: "Of the other options listed below, which do you consider to be the most important public goods that government should support?"

Of the other options listed, we do not consider these to be of higher importance than those listed below in our own list under 'other public goods'. We re-emphasise that economic productivity should not be pursued at the expense of environmental or human health.

Q: "Are there any other public goods which you think the government should support?"

- 1) Health - the Agriculture Bill could use the Barilla Centre's Double Pyramid as a basis for which types of food production should be incentivised.
- 2) The government should work with farmers and retailers to reduce farm waste on UK farms. UK Farm level food waste is estimated 10-16%^v of production or 2.5 million tonnes^{vi}, representing a lost produce value of £0.8 billion^{vi}.
- 3) We agree with Sustain's response to this consultation that the multiple goods delivered by agroecology (especially agroforestry) in a farm system should be rewarded via loan or grants to support new tree planting to enhance yields, farm profitability and resilience and on-going maintenance covered by the Land Management System (LMS). This would deliver additional environmental goods such as reducing soil erosion and enhancing on-farm biodiversity, including pollinators.
- 4) Subsidies for community-supported agriculture (CSA) systems. This would allow for shorter supply chains in which the producer receives a high proportion of what is paid by the consumer. In turn this supports our rural resilience and regional food security.

3. Environmental Land Management – guiding principles for land use in England

We strongly welcome the government's push towards sustainable land management and support the government in integrating the production of environmental goods with food production. **To help the government meet the outcomes in the 25 Year Environment Plan and Clean Growth Strategy we recommend the government defines the purpose of land management as maximum nutritional value for minimal environmental impact or maximal environmental enhancement.** For maximum environmental enhancement agriculture should focus on a diverse portfolio of food production based on sustainable and nutritious dietary guidelines. To deliver this, the Agriculture Bill should remove incentives to use land for:

- 1) growing energy crops and non-edible products;
- 2) growing food whose intake should be limited according to WHO's dietary guidelines, for example sugar.

Energy crops, which are used for energy generation through their use in Anaerobic Digestion to reap clean energy tariffs currently use 132 thousand hectares^{xxi}. The UK also grows four times as much sugar as the UK's recommended intake suggests that we eat^{xxii}. **The UK should reintroduce the sugar beet quotas that were removed in September 2017**, as not having quotas in place reduces the price of sugar and undermines any Sugar Taxes and their outcomes for public health. Incentivising energy crops and sugar is incompatible with a public money for public goods approach as land and topsoil are finite resources that directly impact on our future food security. **To manage our food security, the Agriculture Bill should ensure our farmland and topsoil resources stay within the food system and are not used to grow crops for energy or resold for other amenities.** The following case studies on sugar and energy crops grown for anaerobic digestion explain why these crops do not have a place within a sustainable food system

Focus on sugar: bad for us, bad for the environment

Not all crops degrade topsoil at the same rate^{xxiii}. British Sugar receives over 250,000 tonnes of soil per year along with the 8mt of sugar beet harvested. This soil is recovered and marketed under the brand TOPSOIL, primarily to landscaping and amenity industries. Soil Loss due to Crop Harvesting (SLCH) is a problem for most tuber crops but a literature review of SLCH data measured in Europe revealed average SLCH values for sugar beet to be four times greater than for potatoes^{xxiv}. Sugar beet production also poses pesticide concerns: when pollution in the River Waveney on the Norfolk/Suffolk Border reached acute harm levels in the summer of 2016, experts believed that sugar beet fields were the mostly likely source of pollution^{xxv}.

Given British Sugar's control of the British beet harvest, and their financial interest in the top soil they receive, there do not seem to be strong incentives for British Sugar to support the reduction of SLCH by requiring suppliers to adopt less harmful agronomic harvesting techniques. TOPSOIL reported a five per cent growth in turnover in the financial year to September 2016 and has plans for further growth^{xxvi}. Feedback has been made aware that farmers could be paying more to buy back their topsoil than they were paid for their beet harvest. Given our food, water, and energy needs, current environmental trends, this defies common sense in terms of the best use of the country's finite soil resources.

We recommend the government reintroduces a quota system for Sugar Beet production in the UK to ensure that sugar production does not exceed the World Health Organisation's Recommended Daily Intake of sugar for UK citizens. Sustainable farming must be linked to human health to be truly recognised as sustainable. **We also recommend the government uses the public money for public goods scheme to make horticulture more profitable for British farmers than growing ingredients for processed foods.**

Anaerobic Digestion: a threat to farming and food security

Perverse incentives to send edible food and purpose-grown energy crops to Anaerobic Digestion (AD) should be removed. AD has the potential to play an important role in the UK's energy supply mix. However, this promise is being wasted through a combination of perverse incentives and lax regulations. Now, rather than contributing to solving the energy challenge, AD appears to be causing serious issues to food security, farming communities and soils. We currently face two challenges: first, purpose-grown crops to feed AD plants deplete our soils and contribute to our GHG emissions without adding nutritional value to the food system. Secondly, AD is used as a disposal method for edible food surpluses which could be used to feed people, as per the requirements of the food use hierarchy.

Based on available information, we have found that the approximate ratio of food waste to energy crops being fed to AD is 3/1^{xxvii}. The Anaerobic Digestion and Bioresources Association of UK (ADBA) favours 'energy crops' or 'purpose grown crops' to be used in AD plants^{xxviii}, and some AD plants use energy crops only. In 2016, nearly 30% of all maize grown in England was grown for the production of biogas^{xxix}. This sector is growing fast, up from 17% just two years before. The National Farmers Union's target for AD would mean that by 2020, more than 1,200 square kilometres of prime arable land in the UK would be used just to grow crops for AD - a land mass that could be used to instead grow 5.5 million tonnes of potatoes^{xxx}. Moreover, maize requires heavy pesticide and tractor use which leaves the soil much more vulnerable to compaction and erosion than other crops^{xxxi}. Digestors are threatening soils and biodiversity outside the UK too: digestors are being 'fed' food waste that could have been fed to livestock, forcing farmers to import their feed from abroad rather than use locally produced by-products. For example, in Scotland the AD industry's widespread use of distillery grain waste (traditionally fed by local farmers to livestock) has raised prices to the point where many farmers now import protein feed from South America.

Subsidies for bio-energy production and the lower costs of sending food surplus to AD compared to other methods of revalorisation such as redistribution to charities have made AD an attractive method for businesses to dispose of food surpluses. WRAP have highlighted 860,000 tonnes of currently permissible waste food not being used for animal feed due to perverse financial incentives^{xxxii}. **To avoid this perverse situation and ensure redistribution and animal feed takes priority over AD we recommend that the Renewables Obligation Certificates are only used for AD of non-edible food waste that is otherwise destined for landfill (as is the case with the Renewable Heat Initiative).** Removal of perverse incentives for AD would complement our earlier recommendation to lift the ban on feeding catering waste to non-ruminant omnivore livestock, enabling even more food to stay within the food system.

Thirdly, growth of the AD industry should not be contingent on an unsustainable food system. WRAP has identified a growth in AD plants from 54 in 2011 to 266 in 2017^{xxxiii}. While AD is a useful technology to recover energy from unavoidable food waste which cannot be used for animal feed, the priority should be to reduce generation of food waste in the first place, rather than to expand the AD industry to meet current levels of waste generated. Feedback envisions that the AD industry should largely be contained by municipal contracts for household and catering food waste disposal that is not suitable for animal feed. Government policies and incentives to AD plants should ensure that human- or animal-edible crops are never grown specifically for AD. We agree with the recommendations of the Royal Academy of Engineering in their 2017 report 'Sustainability of liquid biofuels', which encourage the clear categorisation of wastes and residues to avoid market distortions and disincentivising the use of crops grown specifically for AD which can drive unsustainable land-use change^{xxxiv}. **We recommend that the government review its Anaerobic Digestion strategy and action plan in light of the Clean Growth Strategy, the Food and Farming Strategy and the UK's obligations under the Paris Accord.**

Consultation questions – Enhancing our environment

Q: “From the list below, please select which outcomes would be best achieved by incentivising action across a number of farms or other land parcels in a future ELMS.”

Feedback is in favour of all the outcomes listed being achieved by incentivising action by single or groups of farms. As discussed above, other outcomes that we would add include:

- *Human health*
- *Resilience of our food system*
- *Food security now and in the future*

Q: “What role should outcome based payments have in a new environmental land management system?”

Feedback agrees with Sustain, that payments should not be based solely on outcomes as this approach may rule out funding for key factors that merit support. There must be a role for systems-based approaches such as organic farming and agroforestry. Public payments should incentivise a variety of farm types and sizes that supply a variety of retailer

types; this is important for enhancing regional food security. We would like to see a subsidy system for agroforestry to support the initial transition to a market in which sustainable agriculture is profitable.

Q: “How can an approach to a new environmental land management system be developed that balances national and local priorities for environmental outcomes?”

We would like to see a Soil Act introduced to ensure resilience of our local and national food system. This could be modelled on the Climate Change Act and would require a soil health baseline and targets to test progress against. Similarly we would like to see a Biodiversity Act adopting the same approach. Please also see Sustain’s suggestion for a National Rural Land Management Policy integrating farming and the environment.

Q: “How can we improve inspections for environmental, animal health and welfare standards?”

We support the application of considered regulation to support low-impact food production, and optimal use of food, food waste and nutrients within the food system. We are concerned that Government initiatives to reduce regulation have given disproportionate weight to the policy aim of reducing regulatory costs to businesses. This has come at the expense of beneficial societal and environmental outcomes, and risks undermining the achievement of wider public policy goals. The Government’s deregulatory agenda has strongly emphasized the perception of regulation as a ‘burden’. We consider this rhetoric to be one-sided and unhelpful. It is also misleading, given that the UK is one of the least regulated countries in the developed world.^{xxxv} Effective regulation is a crucial component of ‘Brand Britain’ and the recognition of food production with high environmental and welfare standards.

We do not believe that a move towards self-reporting or voluntary measures is compatible with a transition to a more sustainable food system. We understand that there is a place for earned recognition but this should not be used in the early stages of the Environmental Land Management Scheme.

4. Risk management, resilience and fairness in the supply chain

Our comments in this section highlight the link between risk management and resilience and fairness in the supply chain (chapters 10 and 12 of the Command Paper). Feedback’s own research confirms the findings in the Command Paper that the agricultural sector is characterised by a power imbalance (see our 2018 report ‘Farmers talk food waste: supermarkets’ role in crop waste on UK farms’). Supermarkets have over 85% of the market share of grocery stores in Great Britain^{xxxvi}, allowing them to transfer risks and costs of food production to farmers in ways that often endanger their livelihoods. Common trading practices facilitated by this power imbalance, including order cancellations, last minute changes to forecasts, retrospective changes to supply agreements and the use of cosmetic specifications to reject produce, can all cause food to be wasted, as well as undermining farmer livelihoods and increasing volatility. As discussed above, food waste also poses a serious challenge to sustainable productivity and to the longer-term resilience of our food system.

Despite adoption of the Groceries Supply Code of Practice and the work of the Groceries Code Adjudicator in overseeing compliance with the Code, suppliers continue to operate within a ‘climate of fear’ due to highly imbalanced market power: in 2017 nearly half (47%) of suppliers said fear would prevent them raising an issue with their buyer and 62% say they still experience unfair trading practices^{xxxvii}. Our research has also found that agricultural insurers are affected by unfair trading practices. One insurer told us:

“Unfair trading by supermarkets affects us too, of course. As an insurance company, we are expected by clients to defend their interests. However, we do not issue claims and challenges when we believe food is rejected unfairly, because our clients fear being delisted or losing business and instruct us not to claim. This in turn damages our relationship with clients, who simultaneously are reluctant to challenge behaviour and, conversely, are asking us as insurers ‘what do I pay you for if you can’t pay out for losses on cargo?’. We are stuck in the middle, managing relationships within a completely broken market.”^{xxxviii}

With the burden of managing risk in our food supply chain continuing to sit squarely with farmers, further action from government is needed to ensure the resilience of our food system. We were disappointed by the government’s decision earlier this year not to extend the remit of the GCA to cover indirect suppliers, who are disproportionately likely to be smaller producers, more vulnerable to both volatility in income and market power imbalances. **We continue to recommend that the government extend the GCA’s reporting and investigatory powers to cover indirect suppliers.**

We agree with the Command Paper that data availability is a key role government may play to improve fairness and resilience in the supply chain. In addition to exploring the case for mandatory reporting of price and volume data for some agricultural commodities, **we recommend government require mandatory public report of food waste data**

throughout their supply chains for large food businesses. This would help to expose and disincentivise practices which push food waste and risk from large food businesses such as retailers onto their suppliers. Consistent measurement should also include qualitative examination of the causes of food waste, taking a whole supply chain approach including analysis of power relations across the supply chain.

Ultimately, only a diverse food supply chain with a variety of models of groceries supply as well as production methods will provide a resilient, competitive and sustainable market. **We recommend that the government consider how it can support and incentivise a more diverse groceries retail market, for example through community-supported agriculture schemes and other localised systems which create shorter supply chains.** We note that food business ownership structures, such as global shareholder-owned companies, increase the vulnerability of our food supply chain to global price shocks and delocalisation.

One method to support a resilient and secure food system is through public procurement, which should be accessible for smaller food producers. The £1.2 billion spent on food and drink every year by the public sector has huge potential to support local small food producers and improve regional food security.^{xxxix} Procurers should be mandated to use the balanced scorecard within their tender documents. The procurement portal should be made as simple to use as possible to ensure it is not too onerous for small producers. Procurers should be made aware of the Food Procurement Information Service to help them to source responsibly and in a way which is compliant with the balanced scorecard approach. Case studies should be shared widely, such as that of Royal Liverpool Broadgreen University Hospital Trust who worked with Liverpool Food People to attain a contract encompassing a Soil Association's Food For Life catering mark.^{xl}

Consultation questions – Risk management and resilience

Q: “What additional skills, data and tools would help better manage volatility in agricultural production and revenues for (a) farm businesses and (b) insurance providers?”

The requirement for large food businesses to publish food waste data, including throughout their supply chain, would disincentivise the use of market power and trading practices which cause waste and volatility for producers.

Q: “How can we improve transparency and the relationships across the food supply chain?”

As discussed above, transparency on food waste and importantly causes of food waste, throughout the supply chains of large food businesses, would encourage fair behaviour between retailers and their suppliers.

Q: “What are the most effective ways to support new entrants and encourage more young people into a career in farming and land management?”

We support Sustain's response that Defra should:

- *Ensure eligibility for on-going support (agri-environmental, rural development, capital grants and loans ring-fenced to support new entrants and SMEs and so on) includes all active farmers, including during the precarious period of transition to a new system. To keep administrative costs to a minimum, payments for farms under a certain threshold could be awarded as multi-year contracts.*
- *Commission a review of issues that affect farm viability, and new entrants in particular, including land prices, new models for tenancy, security of tenure, planning issues and loss of county farm estates.*
- *Provide grants or low/no interest loans – easily available, simple to apply for and well-advertised – targeted to smaller farm business sizes to deliver specific tools to maintain or boost important sectors and approaches, including:*
 - *sustainable horticulture (especially urban and peri-urban to provide fresh and perishable goods nearest to markets); mixed farming; new entrants; agroforestry; succession associated with new farm ownership (i.e. not for farm amalgamation); sustainable orchard planting; on-farm education initiatives; mixed farming; and existing farms creating significant step changes towards direct marketing, higher animal welfare, increased sustainability and delivery of public goods.*
 - *Feed the latent entrepreneurial vigour for developing organic food supply chains, particularly for vegetables, salads and fruit. Provide support to the smallest operators that can be highly productive and provide vegetables and fruit to local markets, to make up for the fact that currently operators on less than 5 hectares receive no public payments.*
 - *Ensure that schemes are simple, low level, multi-annual and accessible to small businesses that have limited administration and IT capacity.*

Q: “Does existing tenancy law present barriers to new entrants, productivity and investment?”

Feedback agrees that existing tenancy law presents barriers to new entrants, sustainable productivity and investment. We agree with Sustain that:

“Short-term Farm Business Tenancies that are increasingly the norm limit the opportunity for a farmer or grower to take a long-term view on the development of their holding, for instance in agroforestry, livestock housing or organic. Converting to organic takes at least two years, and it is recommended by organic experts to convert the farm gradually to allow the knowledge and experience of organic techniques to develop. Short-term tenancies do not allow this and thus represent a barrier to new entrants and a focus on short-term, input driven, and technology dependent productivity that is arguably inherently extractive and unsustainable. This is detrimental to the delivery of public goods.”

5. International Trade

We believe the narrow focus on lower prices for consumers in the Command Paper’s trade chapter will undermine the environmental benefits from the Environmental Land Management Scheme and any efforts to make supply chains fairer. Cheap food prices arise from externalities that are paid neither by business nor by the consumer and instead threaten our soil, biodiversity and climate. This leads to inefficient demand of cheap food stuffs. Citizens want to support highly regulated British farming, but consumers have limited time to decipher labelling information and so price is a quick determinant of choice. People who can afford to buy, and want to support, high quality British foods, but face time constraints, often opt for the cheapest option. Furthermore, 30-40% of food expenditure in Britain is spent eating out or in takeaway establishments where information is scarce^{xli}. Citizens trust their government that food sold in Britain adheres to British food production standards, whereas in truth the food we import does not meet the high quality of British grown food. The public support an environmentally friendly farming system; cheap food simply means offshoring our environmental impact elsewhere.

Overall we want to see sensible trade that does not mean watering down of standards including that of land management; we do not want to accept lower land management standards overseas for the food we import and instead trade deals should support imports only from countries with equal land management standards as ours. The government’s 25 Environment Plan has a commitment to zero deforestation in British supply chains. Upholding these commitments in our supply chains would mean not offshoring our environmental impact. For example, the environmental impact of pork production should always consider the overseas environmental impact of growing feed. The new Agriculture Bill should ensure it is cheaper for farmers to feed their livestock with locally produced food waste than with imported feed crops. The subsidy system should therefore take account of detrimental land use elsewhere as well as supporting food security at home. **Feedback recommends we reduce our dependence on imports of feed in the face of climate change and the probable price increase and volatility of feed crops that will arise.** Our current reliance on importing animal feed is an obstacle to this and should be addressed through the review of the ban on using catering waste and food surplus containing meat from retail and manufacturing as feed for omnivorous non-ruminant livestock. Ensuring that food stays in the food system, rather than going to Anaerobic Digestion, will also support food security at home.

Consultation questions – International trade

Q: “How far do you agree or disagree with the broad priorities set out in the trade chapter?”

We agree with Sustain that lower prices for consumers are not likely to be compatible with “high standards of consumer, worker and environmental protection” without significant measures to control the significantly higher profits taken from the food pound by the upstream food industry.

We also agree that the UK should be setting parameters for our trade negotiators that uphold high standards for food, farming and fishing, in a way that is fully accountable and open to parliamentary scrutiny and review.

Q: “How can we best protect and promote our brand, remaining global leaders in environmental protection, food safety and in standards of production and animal welfare?”

The UK should be demanding mandatory methods of production labelling for imported food products to drive up health, livestock, environment and labour standards. Imports that do not conform should be subject to tariffs that are sufficiently high to safeguard UK farmers; imports that meet UK standards would benefit from a low or zero tariff. For all food, but for livestock products in particular, it is clear we should require labelled as to farming method of production. No trade deals should allow this commitment to be undermined.

6. The Agriculture Bill

Q: “How far do you agree with the proposed powers of the Agriculture Bill?”

- i. *As mentioned above, we believe it is important that payments are made only to active farmers and not to landowners. Sustainable land management must be integrated with food production if it is to have positive effects on soil, biodiversity and climate change while ensuring rural resilience and regional food security*
- ii. *We support an ELMS application system that is accessible to all farmers, whatever their size, and the government must ensure the application process is not prohibitive to any active farm. However as mentioned above we consider the rhetoric of regulation as a ‘burden’ to be one-sided and unhelpful. Effective regulation is a crucial component of ‘Brand Britain’ and the recognition of food production with high environmental and welfare standards.*
- iii. *We support payment of public money for environmental public goods as long as the payments are integrated with farming’s core environmental footprint. The purpose of land management should be defined as maximum nutritional value for minimal environmental impact or maximal environmental enhancement. What we grow directly impacts the health of the public and of the planet.*
- iv. *As discussed previously, we are concerned that Government initiatives to reduce regulation have given disproportionate weight to the policy aim of reducing regulatory costs to businesses. This has come at the expense of beneficial societal and environmental outcomes, and risks undermining the achievement of wider public policy goals.*
- v. *We support this.*
- vi. *We support proper devolution of responsibilities and budget for devolved nations under an overarching framework agreed by consensus to ensure cross-border issues are addressed.*
- vii. *We support this but only want to see payments made to active farmers.*

Q: “What other measures might we need in the Agriculture Bill to achieve our objectives?”

We support Sustain’s response that the new purposes for the UK Agriculture Bill should be:

- *a remit to support **healthier diets** including enforcing high public sector procurement standards for schools, services and hospitals and ensuring public money supports production of healthy produce and transition to healthy produce*
- ***ensuring quality of farm employment via** powers to ensure the protection and advancement of farm workers via a new joint negotiating body*
- ***promoting farm diversity** – via measures to assess the resilience of the farm structure and measures which ensure diverse farm sizes can be retained to deliver the full mix of outcomes a diverse system delivers including routes in for new entrants*
- ***fair supply chain** – powers to deliver measures to proactively evaluate and address unfair trading practices in the whole supply chain on an on-going basis*
- ***whole farm systems delivery** - measures to promote whole farm systems which deliver multiple benefits*

We also call for the government and the Agriculture Bill to:

- *recognise productivity as nutritional value consumed by acreage and not tonnage produced by acreage. We recommend the government incentivises a diverse portfolio of food production based on sustainable and nutritious dietary guidelines such as the Barilla Centre’s Double Pyramid^{xlii}*
- *commit to measure food waste occurring on farms, set targets to halve UK food waste from farm to fork by 2030 and to consider food waste measurement and reduction, in particular on farms, be considered a public good*
- *lift the current ban on using catering waste and food surplus that may contain traces of meat from retail and manufacturing as feed for omnivorous non-ruminant livestock, such as pigs and chickens*
- *recognise the resilience of England’s food system and current and future food security as public goods*
- *define the purpose of land management as maximum nutritional value for minimal environmental impact or maximal environmental enhancement*
- *reintroduce a quota system for Sugar Beet production in the UK to ensure that sugar production does not exceed the World Health Organisation’s Recommended Daily Intake of sugar for UK citizens*
- *ensure our farmland and topsoil resources stay within the food system and are not used to grow crops for energy or resold for other amenities*
- *ensure redistribution and animal feed takes priority over AD and review the Anaerobic Digestion strategy and action plan in light of the Clean Growth Strategy, the Food and Farming Strategy and the UK’s obligations under the Paris Accord*
- *extend the GCA’s reporting and investigatory powers to cover indirect suppliers*

- Government to consider how it can support and incentivise a more diverse groceries retail market, for example through community-supported agriculture schemes and other localised systems which create shorter supply chains
- to support a resilient and secure food system through public procurement, which should be accessible to smaller food producers
- to reduce our dependence on imports of animal feed in the face of climate change and the probable price increase and volatility of feed crops that will arise

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