

## **Written evidence submitted by Wildlife & Countryside Link**

### **Environment Food and Rural Affairs Committee: Food Security Inquiry**

#### **September 2022**

*Wildlife and Countryside Link (Link) is the largest environment, countryside and wildlife coalition in England, bringing together 67 organisations to use their strong joint voice for the protection of nature.*

#### **Summary**

- The main threats to food security is climate and ecological breakdown, which are already inhibiting food production in the UK.
- The Agricultural Transition must not be delayed or discarded. A faster, more effective, better funded roll-out for greener farming is the best way to addresses these risks, accelerating the climate-proofing of food production in this country.
- This faster rollout will also increase support and certainty for farmers in the short and medium term, helping them to overcome the challenges posed by the Ukraine war.
- Deregulation poses a threat to future food security. Many of the laws in the Retained EU Law Bill will need to be protected or re-introduced in order to safeguard the ecosystems upon which food security relies.
- The land use strategy could help maximise the co-benefits of greener farming, charting out how increased production of healthy food, climate adaption and nature's recovery can be effectively delivered in tandem.

**Q1: What are the key factors affecting the resilience of food supply chains and causing disruption and rising food prices – including input costs, labour shortages and global events? What are the consequences for UK businesses and consumers?**

#### **Key factors affecting the resilience of UK food supply<sup>1</sup>**

1. Before the Ukraine conflict, there were other serious challenges facing the farming sector that were already affecting UK food security. The Government's Food Security Report 2021 identified climate breakdown and nature decline as the biggest threats to domestic food security: *'Climate change and emissions pose significant risks to production and food security. As a consequence of unusual weather patterns associated with climate change, wheat yields in 2018 were 7% below the 2016 to 2020 average, and in 2020 were 17% below that average.'*<sup>2</sup>
2. Climate change and biodiversity loss affect the majority of foods produced in the UK. The long hot summer of 2018, of a type we can expect to see more of in the years ahead, saw

---

<sup>1</sup> Some of the evidence in this section was also submitted by Link to the Environmental Land Management: Progress update inquiry.

<sup>2</sup> <https://www.gov.uk/government/statistics/united-kingdom-food-security-report-2021/united-kingdom-food-security-report-2021-theme-2-uk-food-supply-sources#united-kingdom-food-security-report-2021-theme2-indicator-2-3-2>

onion yields down 40%, carrot yields down 25% and potato yields down 20%.<sup>3</sup> The full economic and social impact of the extreme weather in July 2022 on the farming sector is yet to be seen, however it is clear that the extreme heat has had a negative impact on the livestock sector, as grasslands have become arid, and has had negative impacts on arable crops for which we are likely to see reduced yields of as much as 50% on some crops.

3. These extreme climatic conditions are not an anomaly, but are a pattern emerging as a result of human induced climate change.<sup>4</sup> These events are now happening more frequently, and with greater intensity. It is absolutely essential that the joint biodiversity and climate crises are tackled to safeguard food security.
4. Until now, with the opportunity that the new Environmental Land Management (ELM) schemes and the 'public money for public goods' (PMFPG) approach affords, outdated agricultural policies have exacerbated the impact of these crises, with negative economic impacts. For example, the Food Security Report suggested that *'soil degradation, erosion, and compaction result in losses of about £1.2 billion each year and reduce the capacity of UK soils to produce food'*.<sup>5</sup>
5. These impacts are of understandable concern to farmers. Research in 2021 by the University of Exeter found that each and every farmer interviewed *'had experienced or witnessed issues caused by extreme weather such as heavy rain or prolonged dry spells in recent years, and expected these to intensify further'*.<sup>6</sup>
6. The effects of these environmental threats are compounded by widespread reliance on conventional farming methods, which depend on large-scale and expensive inputs. Rising gas and fertiliser prices due in part to the conflict in Ukraine are also putting a strain on farm businesses and leading some farmers to question planting a crop which will lead to reduced outputs.
7. This is another clear reason for why we need to urgently help farmers to transition away from an over-reliance on fossil fuel inputs (e.g. chemical fertiliser) and adopt more regenerative farming methods. If high prices persist for another 12 months, the additional fertiliser bill for British farmers could be £760 million, assuming farmers purchase and apply the same quantities of chemical fertiliser as in a normal 12 month period.<sup>7</sup>
8. The reliance on fertiliser and fuel from overseas gas is increasing UK farming costs, just as climate and ecological damages are reducing the amount of UK food produced. These are two closely linked problems, with the former exacerbating the latter.

---

<sup>3</sup>[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/869062/structure-jun2018final-uk-28feb20.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/869062/structure-jun2018final-uk-28feb20.pdf)

<sup>4</sup> <https://www.carbonbrief.org/climate-change-made-2022s-uk-heatwave-at-least-10-times-more-likely/>

<sup>5</sup> <https://www.gov.uk/government/statistics/united-kingdom-food-security-report-2021/united-kingdom-food-security-report-2021-introduction>

<sup>6</sup> [https://www.exeter.ac.uk/news/homepage/title\\_857812\\_en.html](https://www.exeter.ac.uk/news/homepage/title_857812_en.html)

<sup>7</sup> <https://ca1-eci.edcdn.com/Food-farming-fertiliser-March-2022-ECIU.pdf?v=1648124498>

9. Not only is fertiliser use costly for farm businesses it is also damaging rivers, air and soils. An average 40% of nitrogen fertiliser in the UK is left unused or leaks into the environment, contributing to soil erosion and exacerbating climate change by evaporating into the environment.<sup>8</sup> GHG emissions from fertiliser production are also high. For the UK arable sector, nitrogen fertiliser production and use accounts for 60%-70% of agricultural emissions. Yet a recent report suggested farmers could reduced average nitrogen use by 40% on a wheat crops without a yield penalty.<sup>9</sup>
10. A continued reliance on fossil fuel-based products on farms is one of the reasons that the sector continues to be a significant emitter of carbon; farming makes up 0.52% of UK GDP<sup>10</sup> but 12% of our territorial greenhouse gas emissions.<sup>11</sup>
11. As set out in the Climate Change Committee's Sixth Carbon Budget, significant reductions to carbon emissions from UK agriculture could also be made by lessening methane produced from intensive livestock farming.<sup>12</sup> A 2022 from the Boston Consulting Group suggests that investment in alternatives to intensive livestock farming *"has the highest CO2e savings per dollar of invested capital of any sector"*.<sup>13</sup>
12. If UK farming continues to operate to recent precedent, continued fuel and fertiliser reliance will make production yet more expensive in an increasingly uncertain world, whilst contributing to an accelerating decline in yields driven by climate and ecological breakdown. The status quo is an escalator to chronic food insecurity.

**Rather than undermining it, biodiversity and climate change mitigation and adaptation underpin food security**

13. Biodiversity, climate resilience and food security are not competing priorities – they are completely interdependent. Farming in a way that supports biodiversity, whilst adapting to and mitigating climate change, will underpin and secure resilient and profitable farm businesses well into the future.
14. Investment in nature friendly farming is proven to help maintain and even improve yields. one study showed that organic systems have the potential to produce yields up to 40% higher than conventional systems in times of drought.<sup>14</sup> Another study demonstrated that managing 8% of a farm for nature helped to maintain and even enhance yields of some crops and led to no loss in economic or nutrient value.<sup>15</sup> Another study. On the contrary, a 30% decline in

---

<sup>8</sup> <https://www.cpm-magazine.co.uk/2021/10/07/nature-natters-getting-to-the-root-of-the-problem/>

<sup>9</sup> [https://green-alliance.org.uk/wp-content/uploads/2021/11/protecting\\_our\\_assets.pdf](https://green-alliance.org.uk/wp-content/uploads/2021/11/protecting_our_assets.pdf)

<sup>10</sup> [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/1049674/agricaccounts\\_tiffstatsnotice-16dec21i.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1049674/agricaccounts_tiffstatsnotice-16dec21i.pdf)

<sup>11</sup> <https://www.gov.uk/government/statistics/final-uk-greenhouse-gas-emissions-national-statistics-1990-to-2019>

<sup>12</sup> <https://www.theccc.org.uk/wp-content/uploads/2020/12/Sector-summary-Agriculture-land-use-land-use-change-forestry.pdf>

<sup>13</sup> <https://www.bcg.com/publications/2022/combating-climate-crisis-with-alternative-protein>

<sup>14</sup> <https://rodaleinstitute.org/science/farming-systems-trial/>

<sup>15</sup> <https://royalsocietypublishing.org/doi/10.1098/rspb.2015.1740>

pollinator numbers over 10 years would cost more than £188m per year in lost crop yield.<sup>16</sup> If supported by public goods payments this could provide the foundation for more resilient farm businesses.

15. Agroecological/regenerative practices are being adopted more widely across the board, which demonstrates the good business sense that many of these methods provide. For example, many farmers are already managing soils to improve their health and reduce the need for chemical inputs. One survey found that 92% of farmers are already using some form of sustainable soil management<sup>17</sup>, with others going further and cutting out chemical fertilisers altogether to replace them with plants that restore soil richness naturally.<sup>18</sup>
16. Agroecological practices can also increase profitability. For example, the cost saving for a tonne of no-till wheat (a sustainable arable farming practice) is an estimated £23 per hectare compared to the average UK farm.<sup>19</sup> A case study from East Yorkshire also showed that a low/no-till system led to a 25% reduction in nitrogen applications and a 33% reduction in fuel and labour costs.<sup>20</sup>
17. In the marine environment, well-protected marine sites can improve food security in the medium/long term. For example, proposed HPMA (if delivered in the right manner) will conserve wildlife and habitats on a large scale, so the number, diversity and size of fish will increase. Neighbouring fisheries will benefit as commercially and recreationally fished species spill over into surrounding waters, helping restock our overfished seas.<sup>21</sup>
18. For this reason, strong marine protections such as HPMA should not be seen as standing in opposition to a flourishing fisheries sector, but rather as complementary, helping ensure the health of our seas for generations to come. The benefits of no-take zones have been seen in Scotland in Lamlash Bay where studies have shown that marine life has flourished since the establishment of Scotland's first no-take zone. Some species are reported to have increased by nearly 400% since protection measures were introduced, with benefits for exploited fish stocks. The designation of Lyme Bay in southwest England as an MPA added £2 million to the total value of tourism and recreation in the area and the restriction of bottom-towed fishing gear has seen an increase in the number of exploited fish by 430% and total abundance by 370%, inside the MPA over 11 years.<sup>22, 23</sup>

## **The need to continue and strengthen the Agricultural Transition**

---

<sup>16</sup> <https://www.ceh.ac.uk/news-and-media/news/pollinator-monitoring-more-pays-itself>

<sup>17</sup> <https://www.sheffield.ac.uk/sustainable-food/research/translational-transformative/achieving-sustainable-soil-management-uk#Research%20findings>

<sup>18</sup> [https://www.nffn.org.uk/wp-content/uploads/2021/04/NFFN-Case-Study-Leaflets\\_JOHNNIE-BALFOUR-1.pdf](https://www.nffn.org.uk/wp-content/uploads/2021/04/NFFN-Case-Study-Leaflets_JOHNNIE-BALFOUR-1.pdf)

<sup>19</sup> <https://pdf.euro.savills.co.uk/uk/rural---other/spotlight---regenerative-agriculture-2021.pdf>

<sup>20</sup> <https://www.no-tillfarmer.com/articles/11373-british-farmer-switches-to-no-till-to-save-money-on-rising-input-costs>

<sup>21</sup> [service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/890484/hpma-review-final-report.pdf](https://service.gov.uk/government/uploads/system/uploads/attachment_data/file/890484/hpma-review-final-report.pdf)

<sup>22</sup> <https://doi.org/10.1016/j.marpol.2015.09.011>

<sup>23</sup> <https://doi.org/10.1111/1365-2664.13986>

19. To reap the benefits that biodiversity and climate change mitigation and adaptation will bring to the sector and to increase food security, the Agricultural Transition is needed now more than ever. Rather than pitting biodiversity and climate action against food production, the new ELM schemes can leverage an approach that benefits all.
20. 'Direct payments' have long been inefficient, ineffective and inequitable, not just for the environment but also for farm business viability - and it does little to address concerns about the UK's overall food security and resilience in the face of climate change and other risks. It also does far too little to support the kind of countryside, or food production. In the future, there will need to be more evidence of the effective use of taxpayer money if farming payments are to continue.
21. Speeding up the transition towards a new farming system that works with the grain of nature is vital for ensuring future food security, establishing a new and more certain contract between farmers, government and society, and therefore creating the right environment for farm businesses to prosper. In contrast, a two-year delay to the transition would halve the contribution of the new ELM schemes to the fifth carbon budget (2028-32), leaving a substantial gap in the UK's net zero plans. In other words, if intensive methods of food production are not addressed through policy and support for farmers now, the very ability to produce food will be undermined by nature decline and climate change in future.
22. As well as increasing food security, the new approach to farm payments will provide value for money for the taxpayer. Programme investment over the agricultural transition (financial year 2021 and 2022 to financial year 2028 to 2029) will deliver a net present social value of £28.7 billion, with an overall estimated benefit-cost ratio of 2.5.<sup>24</sup>
23. The PMFPG principle will also underpin a range of benefits for society. These include cleaner water and air, climate adaptation measures such as healthier soils, improved biodiversity to underpin vital natural processes such as pollination, and improved public access to the countryside which will drive increased understanding and support of the farming sector.
24. A new PMFPG approach is also expected to drive private investment into farm businesses as biodiversity and carbon markets develop. It is estimated that a £700m per year market could be created for farmers to offset carbon emissions.<sup>25</sup>
25. The initial roll-out of ELM schemes have the potential to demonstrate how food production and nature restoration can go hand in hand under this approach:
  - a. The Sustainable Farming Incentive 2023 schemes will be supporting farmers to improve soil health through a range of measures such as increased soil cover to reduce erosion and fix nitrogen.

---

<sup>24</sup> [13 September 2021: Future Farming and Countryside Programme Phase 2 business case: accounting officer assessment - GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/news/13-september-2021-future-farming-and-countryside-programme-phase-2-business-case-accounting-officer-assessment)

<sup>25</sup> <https://ca1-eci.edcdn.com/Levelling-Up-Farming.pdf?v=1661027191>

- b. The majority of the initial 22 Landscape Recovery projects will support food production to some degree. For example, the successful ‘Weald to Waves’ project involves seven major landowners, at-least four of which are farmers, who will create biodiversity corridors on-farm, which will support biodiversity benefits such as increased predatory insects, improved irrigation and improved water quality.<sup>26</sup> While the purpose of Landscape Recovery is to enable landscape scale projects to harness the benefits of nature-based solutions, this does not quell the integration of some food production within those projects.

26. In 2023, the Agricultural transition Plan commits to rolling out:

- c. New standards for the Sustainable Farming Incentive which will further support regenerative/agroecological food production such as an agroforestry standard, which could increase crop diversity by introducing fruit and nut production, or which could provide shelter and fodder for livestock.
- d. The initial Local Nature Recovery roll-out and subsequent options will support a range of on-farm benefits such as nature-based solutions for water – such as creating and managing in-field vegetation, buffer strips and swales to reduce and filter runoff and contribute to natural flood management.
- e. There is potential for another round of the Landscape Recovery scheme, which would continue to fund collaborative projects focused on climate adaptation, which could include some food production.

### **The need for robust regulation**

- 27. Robust regulation underpins food security as it protects the natural assets upon which food production relies. It also creates a fairer business environment for farmers by ensuring that all farmers, land managers and in the case of the marine environment fishing companies have a responsibility to protect the environment and are not undermining natural assets.
- 28. The Retained EU Law Bill proposes to amend or scrap many of the laws that govern farming and fishing, including:
  - a. The Conservation of Habitats and Species Regulations 2017: rules that protect hundreds of wildlife sites from unsustainable development and safeguard threatened species from destruction.
  - b. The Water Environment (Water Framework Directive) (England and Wales) Regulations 2017: the laws that set strict standards for rivers and streams, guarding against pollution and over-abstraction.
  - c. The Air Quality Standards Regulations 2010: imposing limits on toxic air pollution, such as particulate matter, which is responsible for widespread environmental harm and serious harm to human health.
  - d. The Marine Strategy Regulations 2010: requiring government to implement plans for the protection of our seas and vulnerable sea life.

---

<sup>26</sup> <https://www.wealdtowaves.co.uk/new-page>

29. The threat to these regulations creates further uncertainty for farmers, and therefore will impact on food security. A deregulatory environment for farmers will likely lead to a faster depletion of soils, water quality and other parts of nature that are crucial for food production. In the marine environment, further environmental degradation will further undermine the fishing sector.
30. It is also unclear how the Planning and Infrastructure Bill proposals will affect food security, for example they could cover parts of agricultural land on the urban/rural fringe, which could see more prime agricultural land lost to development.

### **New technologies to improve farming practice**

31. There are a number of upcoming and developing novel food technologies that are not yet mainstream, but could play a role in shaping the food system of tomorrow. For example robotics and artificial intelligence could help us to better understand the health of soils.
32. With further research and an evidence-based approach these technologies may provide useful tools, but must not be considered “silver bullets” to solving the complex issues currently faced by our food and farming systems. Any new technologies must be transparent, comprehensively peer reviewed, publicly consulted on, developed with farmers and subject to robust regulation following a hazard-based approach to decision-making founded on the Precautionary Principle.
33. New technologies could be part of the solution, but only when incorporated within a wider, integrated approach to food production and land management alongside regenerating soil health, sustainable water management, reduction in chemical use (including fertilisers, pesticides, and veterinary medicines), appropriate livestock selection and integration, and greater habitat provision. If they are utilised to further increase intensification of the farmed environment, or mitigate its harmful impacts, it will only serve to exacerbate existing problems in our food systems.

### **Q6: How could the Government’s proposed land use strategy for England improve food security? What balance should be struck between land use for food production and other goals – such as environmental benefit?**

#### **Balancing trade-offs through smarter land use**

34. Rather than simply increasing output, land must be used more wisely in the UK to optimise food production, maximise agricultural resilience and secure environmental benefits. To do this, there are some key areas of the existing food and farming system that need to be re-evaluated:
  - a. Crops which are not grown for human consumption including:
    - i. Animal feed
    - ii. Biofuels
  - b. Development on prime, high quality agricultural land
  - c. Food waste

#### d. Diets

35. Much of the UK's land is used for non-food crops. Biofuels for example present a challenge for food production in the UK. In 2021, an estimated 121,000ha were used to grow biofuel crops<sup>27</sup>. This land could instead be used to grow food to feed 3.5 million people per year.<sup>28</sup>
36. The phased re-opening of Vivergo, which had previously closed its biofuel processing facility in Hull, and the switching back to accepting domestic feed-quality grain and increased production at the other plant in the UK (Ensus), is likely to add to the problem of reduced food crop output as a result of this year's extreme heat, and with farmers re-evaluating what they do next season. Both operations are expected to have the ability to be fully operational in 2022-23 meaning a forecast increase in the use of grain in the bioethanol sector and a corresponding reduction in grain used for food.<sup>29</sup>
37. Animal feed demand is also putting pressure on both UK and overseas land. In the UK, wheat and barley grown to feed farmed animals uses 2 million hectares of land or 40% of the UK's arable land area.<sup>30</sup> And in 2017, 6.1m tonnes (44%) of the 13.9m tonnes of compound feed manufactured that year came from imported stocks, the majority from outside the EU.<sup>31</sup> This creates demand for land domestically and abroad which is used to feed animals, rather than for human consumption. It can also, in many cases, lead to indirect land-use change and environmental damage, offshoring our environmental footprint.
38. In comparison, only 2% of UK land is used for horticulture and only 0.24% of permanent grassland is certified as being under management to rear pasture-fed livestock.<sup>32,33</sup> ELM schemes must reward more agroecological horticultural practices and underpin extensive and pasture-fed livestock systems.
39. Building development on prime agricultural land is also putting a strain on the UK's food system. Over the past 12 years, more than 14,000ha of prime agricultural land have been lost to development. This is equivalent to the loss of around 250,000 tonnes of vegetables which is enough to provide almost 2 million people with their '5-a-day' for an entire year.<sup>34</sup>
40. By contrast, solar farms are having an insignificant impact on prime agricultural land at present. Currently, mounted solar panels account for only 0.1% of all UK land. This is

---

<sup>27</sup> <https://www.gov.uk/government/statistics/area-of-crops-grown-for-bioenergy-in-england-and-the-uk-2008-2020/summary>

<sup>28</sup> <https://green-alliance.org.uk/wp-content/uploads/2022/06/Food-security-and-UK-crop-based-biofuel-use.pdf>

<sup>29</sup> [https://apps.fas.usda.gov/newgainapi/api/Report/DownloadReportByFileName?fileName=Grain%20and%20Feed%20Annual\\_London\\_United%20Kingdom\\_UK2022-0018.pdf](https://apps.fas.usda.gov/newgainapi/api/Report/DownloadReportByFileName?fileName=Grain%20and%20Feed%20Annual_London_United%20Kingdom_UK2022-0018.pdf)

<sup>30</sup> <https://www.wwf.org.uk/press-release/transform-uk-farmland-boost-food-resilience-tackle-nature-crisis#:~:text=Wheat%20and%20barley%20grown%20to,the%20UK's%20arable%20land%20area.>

<sup>31</sup> [https://www.wwf.org.uk/sites/default/files/2022-06/future\\_of\\_feed\\_full\\_report.pdf](https://www.wwf.org.uk/sites/default/files/2022-06/future_of_feed_full_report.pdf)

<sup>32</sup> [https://www.nffn.org.uk/wp-content/uploads/2022/07/Nature-Friendly-Farming-Network-Rethink-Food-Report-Phase-1\\_DIGITAL\\_LR.pdf](https://www.nffn.org.uk/wp-content/uploads/2022/07/Nature-Friendly-Farming-Network-Rethink-Food-Report-Phase-1_DIGITAL_LR.pdf)

<sup>33</sup> See the Pasture for Life certification scheme, <https://www.pastureforlife.org/certification/>

<sup>34</sup> <https://www.cpre.org.uk/wp-content/uploads/2022/07/Building-on-our-food-security.pdf>



compared to the 0.5% of land that is used for golf courses in the UK.<sup>35</sup> While all types of land use and competing pressures must be monitored, the evidence at this moment in time suggests that solar farms do not remotely pose enough of a threat to food security as the other issues identified, meaning that they do not warrant a policy response as a priority.

41. To reduce mounting land pressures from intensive livestock farming, fair incentives must be available to help farmers transition toward lower-intensity livestock systems, while ensuring that diets change to accommodate this.<sup>36,37</sup> It is not sustainable to continue with or increase the rate of animal and dairy production in the UK, while securing food supply, meeting net zero and recovering nature. Globally, intensive livestock farming alone is already estimated to be responsible for 30% of anthropogenic-caused biodiversity loss, in addition to damage caused to the climate by methane emissions.<sup>38,39</sup>
42. Excessive animal waste produced through intensive farming systems is also responsible for the pollution of soils and waters, thereby further undermining the UK's ability to grow food. These patterns can be observed globally, in the words of Food and Agriculture Organization of the United Nations *'The livestock sector...is probably the largest sectoral source of water pollution, contributing to eutrophication, 'dead' zones in coastal areas, degradation of coral reefs, human health problems, emergence of antibiotic resistance and many others.'*<sup>40</sup>
43. These environmental impacts, undermining the foundations of food production, can be addressed by support for less but better meat from lower intensity livestock farming, and by encouraging, where geographically appropriate (such as on high quality arable land), a switch from intensive livestock farming to vegetables, pulses and grains. The commitment in the National Food Strategy for investment in alternative proteins marks a good start, which should be swiftly delivered.<sup>41</sup>
44. To reduce mounting land pressures from intensive livestock farming, fair incentives must be available to help farmers transition toward lower-intensity livestock systems and consideration given to how consumption patterns can be brought into line with what can be sustainably produced. The potential contribution of changing diets towards improving domestic and global food security should also be actively considered.<sup>42,43</sup>
45. Food waste must also be addressed to secure food supply in the UK. On-farm, waste is caused by a number of reasons including extreme weather, pest infestations, overproduction and

---

<sup>35</sup> <https://www.carbonbrief.org/factcheck-is-solar-power-a-threat-to-uk-farmland/>

<sup>36</sup> <https://www.nationalfoodstrategy.org/>

<sup>37</sup> <https://www.chathamhouse.org/2022/05/sustainable-agriculture-and-food-systems>

<sup>38</sup> <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5532560/>

<sup>39</sup> <https://www.unep.org/news-and-stories/story/methane-emissions-are-driving-climate-change-heres-how-reduce-them>

<sup>40</sup> <https://www.fao.org/3/a0701e/a0701e.pdf>

<sup>41</sup> <https://gfieurope.org/blog/national-food-strategy-sustainable-proteins/>

<sup>42</sup> [https://www.allenisd.org/cms/lib/TX01001197/Centricity/Domain/37/Pulses\\_vs\\_Meat\\_Comparison\\_2014\\_0422c.pdf](https://www.allenisd.org/cms/lib/TX01001197/Centricity/Domain/37/Pulses_vs_Meat_Comparison_2014_0422c.pdf)

<sup>43</sup> <https://www.bhf.org.uk/informationsupport/heart-matters-magazine/nutrition/pulses>

market saturation, fluctuating market prices and more<sup>44</sup>. Whilst ELM schemes cannot address all of these, they can help to mitigate climate change, and support greater natural pest management, which are two of the leading causes of food waste on farms.<sup>45</sup>

46. Balancing trade-offs and smarter land use requires a better understanding of different land uses that have multiple benefits. For example, agroforestry provides multiple benefits both to farm businesses and to the wider public including carbon sequestration, food production, soil health, livestock shelter and biodiversity benefits. Instead of looking at singular land uses with singular benefits, farmers and land managers must be equipped with the tools needed to assess which types of land use have multiple benefits, so that they can make the best use of their land.
47. The promised Land Use Framework should provide these tools, and should begin to address some of the barriers to better land use identified above. This Framework could be used to identify areas of the country that are best suited to different uses, and therefore guide and inform planning, environmental and agricultural policy decisions.
48. For example, if a particular area of land could be best utilised for arable, livestock or horticultural production, as identified in a Land Use Framework, this would help determine where particular SFI standards and Local Nature Recovery (LNR) options could be best deployed. Equally, the Framework could be used to inform land use decisions at the local level in the same way.
49. A national Land Use Framework should direct local/regional strategies, which are built upon community consultation and which identify opportunity areas and scenarios, which better inform about trade-offs and help guide decision-making on land use at the local level.

#### **Q5: Is the current level and target of food self-sufficiency in England still appropriate?**

##### **Increasing the target for food self-sufficiency is not necessarily the answer**

50. Roughly 54% of the UK's food supply is produced domestically.<sup>46</sup> While in theory, the UK has the potential to produce more food, this alone will not automatically lead to greater food security. 'Food security' as commonly understood relies on a range of factors including diets, markets, supply chains, weather, labour, good reciprocal trading relations (especially with the EU) and more<sup>47</sup>. It is not simply about increasing the amount of land used to grow food.

---

<sup>44</sup> [https://www.nffn.org.uk/wp-content/uploads/2022/07/Nature-Friendly-Farming-Network-Rethink-Food-Report-Phase-1\\_DIGITAL\\_LR.pdf](https://www.nffn.org.uk/wp-content/uploads/2022/07/Nature-Friendly-Farming-Network-Rethink-Food-Report-Phase-1_DIGITAL_LR.pdf)

<sup>45</sup> [https://www.nffn.org.uk/wp-content/uploads/2022/07/Nature-Friendly-Farming-Network-Rethink-Food-Report-Phase-1\\_DIGITAL\\_LR.pdf](https://www.nffn.org.uk/wp-content/uploads/2022/07/Nature-Friendly-Farming-Network-Rethink-Food-Report-Phase-1_DIGITAL_LR.pdf)

<sup>46</sup> <https://www.gov.uk/government/statistics/united-kingdom-food-security-report-2021/united-kingdom-food-security-report-2021-theme-2-uk-food-supply-sources>

<sup>47</sup> <https://www.gov.uk/government/statistics/united-kingdom-food-security-report-2021/united-kingdom-food-security-report-2021-introduction>

51. WWII saw an increase in land made available for food production, and yet there was only a 0.5% increase in total production. This was because the land made available for more production was largely on lower-quality soils. What this shows is that freeing up more land for food production will not necessarily lead to greater food security. Instead, the UK must make the best use of the high-quality agricultural soils, while farming in an agroecological way which supports the ecosystems upon which food production relies.
52. In terms of food affordability, prices are driven by global markets, meaning that global supply of agricultural commodities drive prices domestically. This means that unless the UK produces a significant surplus of foodstuffs on global markets, growing more domestically will not lower prices for consumers.<sup>48</sup>
53. Finally, introducing an arbitrary target for food self-sufficiency could have perverse outcomes encouraging unsustainable production that could further damage soils, contribute to climate change and degrade biodiversity and ultimately undermine food security. On the contrary farming within planetary limits will improve food security, whilst helping to address nature and climate crises. It is clear from the evidence outlined above that further intensification of farming will lead to a continued and increased dependence on expensive fossil fuel derived inputs, that will damage the ecosystems upon which farming and food production relies, and further exacerbate climate change.
54. However, a further assessment of self-sufficiency could be beneficial for food security in the UK. This could look at promoting local and domestic supply chains, improving horticultural output in a sustainable way, all while harnessing the best of biodiversity and mitigating climate change.

**For questions or further information please contact:**

Matt Browne & Hannah Conway, Wildlife and Countryside Link  
E: [matt@wcl.org.uk](mailto:matt@wcl.org.uk), [hannah@wcl.org.uk](mailto:hannah@wcl.org.uk)

**This submission is supported by the following Link members:**

RSPB	Bat Conservation Trust
Soil Association	Angling Trust
National Trust	The Humane League
Woodland Trust	Naturewatch
The Wildlife Trusts	Plantlife
Friend of the Earth	Bumblebee Conservation Trust
Humane Society International United Kingdom	Whale & Dolphin Conservation
Rare Breeds Survival Trust	

---

<sup>48</sup> <https://greenallianceblog.org.uk/2022/04/05/how-to-avoid-food-becoming-putins-next-weapon/>