

Written evidence submitted by CropLife UK (FS0086)

CropLife UK is the voice of the UK plant science industry, promoting the essential role of science and innovation in protecting food, parks, gardens, roads and railways, whilst advocating for good stewardship, better regulation and best practice. Our submission focuses on the role that agricultural innovation has to play in bolstering the UK's food security.

1. 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?

The UK is currently in a delicate situation with our food supply. This as a result is impacting the security of food, affordability, quality and its varying availability. To address the first part of the question, one of the main factors affecting food supply chain resilience in the UK is how the government regulates the access provided to farmers to innovative solutions, such as the integral role of Integrated Pest Management (IPM).¹ This integrated and sustainable agricultural intervention helps to improve disease resistance and crop yield, limiting pests through precise technologies that produce more with less. The result of higher yields leads to more affordable food and increased availability. In addition predictability and transparency around the Government's regulation is also important for supply chain resilience. An example of this impacting our food supply is core domestic agricultural policies, such as the National Action Plan on pesticides, impacting sector output.

Furthermore, climate change poses a major problem to food availability and supply chain resilience. It is, therefore, important to mitigate this challenge by accounting for environmental impacts at both governmental and industry level. Although it is encouraging that the UK government has taken initiatives diverging from EU Common Agricultural Policy to fit the English farmer and landscape. This can still, however, be well-mitigated with industry initiatives. An example of this is sustainable land management which preserves biodiversity and gene editing to help plants become more drought resistant. This should be taken on-board and worked upon in a collaborative manner as it will help to combat the growing concerns for food availability and supply chain resilience.

Answering the second question, strong supply chains minimise the impact of wider market shifts on food prices. [Research](#) carried out by agronomist Séan Rickard on behalf of CropLife UK found that the average UK family grocery bill could rise by more than £786 over the course of a year, if we are to continue to not fully embrace agricultural technological innovation and crop protection techniques. To compound this point, the report found that the cost of fresh fruit and vegetables would rise by more than £4 per week, an extra £226 per year, without the use of plant protection products in the UK. This research was carried-out and published pre-pandemic, meaning that these figures are likely to be higher than has been reported, given the nature of global markets at the time of submission.

¹ Integrated Pest Management (IPM) means the careful consideration of all available pest control techniques and subsequent integration of appropriate measures that discourage the development of pest populations and keep pesticides and other interventions to levels that are economically justified and reduce or minimize risks to human health and the environment. IPM emphasizes the growth of a healthy crop with the least possible disruption to agro-ecosystems and encourages natural pest control mechanisms.

To avoid any further threat to the efficient functioning of our supply chains and retain a steady flow of produce to our shelves, it is essential that we bolster our national food resilience. This is possible through a science-led approach to UK's government regulation. This allows for innovative solutions that support our farmers and food manufacturers.

2. What is the outlook for UK food price inflation in the short and medium term? What policy interventions should the Government consider to manage these pressures?

This month, the UK has seen inflation [hit](#) some 10.1%. The last time the Consumer Price Index was in double digits was in February 1982 when it reached 10.2%. More specifically, we have seen leading researchers [suggest](#) that food price inflation could reach 15% by the end of 2022 and market trends suggesting that this increase may worsen.

Given that food price inflation is linked directly to food security and the consistency of supply, it should also be noted that in 2021, the number of people experiencing acute food insecurity [rose](#) to nearly 193 million, up 40 million from 2020. An increase in energy and fertiliser prices is also putting the next global harvest at risk. According to FAO's latest scenarios, the conflict in Ukraine could [increase](#) chronic undernourishment by an additional 18.8 million people by 2023. These movements will all impact upon the UK's food price inflation, in both the short and the medium term.

To address rising food price inflation, we need to look at both the systems we already have in place as well as those we should implement to protect our food security.

CropLife UK believes that the UK must ensure that plant protection products (PPPs) form an important part of agricultural policy going forward. Not only must they be a component of our farmers' respective toolkits, they must be improved upon, through continued investment in research and development. We believe that a national resilience can be best achieved through an inclusive toolkit that equips our farmers with biopesticides as well as chemical PPPs as part of IPM.

PPPs are [currently](#) used to protect crops against the pests, weeds, and diseases that would otherwise cause farmers to lose between 30-40% of food. As the Committee will be aware, PPPs are subject to stringent regulation and all products have been subject to thorough assessments to prove they do not provide any threat to human health, animal health or the environment. In fact, PPPs and other agricultural innovations, such as precision breeding, biopesticides and big data provide farmers with the tools they need to reduce the environmental footprint of farming, support biodiversity and meet our growing food needs. With the UK's population expected to reach 69.2 million by 2030, it has never been more important that we embrace these methods.

The Government must continue to promote the nationwide uptake of Integrated Pest Management (IPM) strategies, with regards to crop growth and pest management. IPM is grounded in a three-step approach to pest management: [prevention](#); [observation](#); and [intervention](#). It is also critical within policymaking to be forward thinking and consider advanced developments in gene editing, this ultimately will support our food security.

Since Brexit, the Government has made some initial progress towards shifting its regulatory approach towards gene editing in the UK. CropLife UK welcomed the recent introduction of the Genetic Technologies (Precision Breeding) Bill to Parliament as a positive step away from the precautionary approach taken by the EU to issues like gene editing, and towards the global mainstream of agricultural innovation. To tackle the pressures our food system faces, we must continue to embrace the agricultural technologies that can support our farmers to produce nutritious foods at higher yields and globally realign with the rest of the world.

In addition, CropLife UK believes that maintaining existing pest control options and creating an operating environment that enables innovation is essential for UK food security and affordability. PPPs and biopesticides are a vital tool for farmers, therefore the Government should implement the regulation of such products in a more predictable and proportionate way so that the UK operating environment is more welcoming of investment, delivering new active substances to legislative targets whilst maintaining high environmental and human health standards.

3. How are the rising cost of living and increasing food prices affecting access to healthy and nutritious food?

A combination of challenges like the rising cost of living, supply chain issues and climate change pressures are all undoubtedly contributing to difficulties in consumers accessing healthy and nutritious food.

As discussed in a previous answer, a report commissioned by CropLife UK found – prior to the cost of living crisis – that the cost of fresh fruit and vegetables would rise by more than £4 per week, an extra £226 per year, without the use of technology like PPPs, making it fundamentally more costly for people to get their five-a-day.

The Institute of Grocery Distribution stated that prices will rise at a rate of 15%, causing households to pay more for fruit and vegetables, Kantars findings reveal that the price of fruit is going to increase by 8%. The National Farmers' Union also [suggesting](#) that there have been further supply chain issues, which will cause there to be reduction in the amount supplied to the UK's shelves this year. We can expect further increases in the price of fruit and vegetables this year. Therefore, it remains important for the Government to adopt an innovation-centred approach to food security and supply, providing growers the tools available to them like gene editing and PPPs

Adding to the above, the new post EU exit operating environment is now more challenging and costly for crop protection companies to invest in the UK. PPPs are a fundamental part of modern food production in the UK, and modern technology, not just traditional pesticides, but biopesticides and precision breeding are crucial in meeting demand for safe, affordable food. The Government has a advantageous opportunity Post-Brexit to implement transposed regulations in a more predictable and proportionate way, as previously identified in the Taskforce on Innovation, Growth and Regulatory Reform Report (16th June 2021). Better implementation of regulation has the potential to reduce unnecessary burden and cost on industry and the regulator, making the UK a more attractive place to invest, maintain and introduce new innovative crop solutions.

4. How will the proposals in the [Government's food strategy policy paper](#) affect:

5. the resilience of food supply chains?;

The focus in the Government's food strategy on improving the resilience of food supply chains and developing longer-term measures to build a more sustainable and resilient food chain are all welcomed by CropLife UK. It is vital that agricultural innovation and technology is used to strengthen existing supply chains. The Government, as part of its food strategy policy paper, has put agricultural innovation at the heart of our approach to ensure resilient supply chains, CropLife UK believes its imperative that the proposals must now be acted upon and implemented, so that agricultural innovation fosters efficiency and productivity in the sector.

6. the agri-food and seafood sectors?;

As outlined above, the food strategy will ensure that agricultural innovation is prioritised as we move forward as a nation in securing our supply chains and lowering food prices, whilst strengthening British

agriculture more broadly. CropLife UK welcomes the embracing of innovation to ensure that food security is improved, and the price of food controlled, in turn.

It is therefore clear that the strategy will significantly impact the agri-food sector, by ensuring that agricultural innovation is placed at the heart of our approach to agricultural production, whilst in turn ensuring that other key targets are, too – sustainability, net zero, and a UK-focused regulatory framework – are pursued and constructed.

7. access to healthy, nutritious food?

The food strategy pushed to ensure that healthy food can be produced efficiently and domestically, in a way that is affordable for the British consumer. Indeed, the strategy highlighted the importance of the UK pursuing long-term measures to support a food system that offers access to healthy and sustainable food for all. By promoting the increasing of farmers' yields, by ensuring that food is produced more efficiently. In terms of the land and other resources required to produce it – as mentioned by the strategy – we can ensure that the innovative techniques used to bring about these efficiencies can increase the supply of healthy, nutritious, food.

As we have discussed, the plan promotes agricultural innovation. With it being established by researchers that without an innovative approach to agricultural production – PPPs, for instance – we would see a 40% increase in the prices of fruit and vegetables, making it somewhat harder for us to eat in a healthy manner. As each average household budgeting 25% of its food expenditure to fruit and vegetables. As a result, an innovative approach to agriculture, as outlined in the strategy, will bring benefit to consumers, by allowing them greater access to healthy and nutritious food.

8. Is the current level and target of food self-sufficiency in England still appropriate?

The UK's actual levels of self-sufficiency in the production of food is about [54% in fresh vegetables, and 16% in fruit](#).

Given that the UK remains susceptible to external pressures, it remains important that we continually look to improve the self-sufficiency of our food production. There has not yet been a target declared for national food security. However these are important steps that need to happen if we are to successfully meet the demands of our growing population.

Ultimately, it remains important that we work to ensure that we make the target for the UK's food security more ambitious than it is currently the case, given that we have witnessed unprecedented events in recent years that have disrupted the supply of produce and undermined our security.

It must recognise that increased self-sufficiency is only achievable by increasing productivity. CropLife UK believes that this must be achieved without increasing the current cultivated areas of the UK and therefore we must strive to increase efficiency in agriculture, which includes the proper implementation of IPM and more broadly Integrated Farm Management.²

9. 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?

It is promising that the Food Farming and Countryside Commission (FCCC) states the importance of the Government integrating innovation into the proposed land use strategy. Indeed, research promoting agricultural innovation has played an important role in [guiding](#) the FCCC's approach to England land use. The Government's land use strategy therefore encourages agricultural innovation –

² <https://leaf.eco/farming/integrated-farm-management>

in the form of gene editing and the development of IPM, with innovation being vital to improve food security. This opportunity to embrace innovative farming, should be taken up by that land use strategy.

However, it is also important that we prioritise food production, along with a move towards a more sustainable farming and land use system in England. As we face a cost-of-living crisis and climate crisis, England must create a strategy that prioritises food production

However, the increasing of food production need not be achieved at the expense of other core objectives, such as our environmental commitments and aims. Agri-tech is an industry that offers a suite of solutions for farmers and the wider population. It provides farmers with the tools they need to farm sustainably and meet global food needs, while balancing environmental considerations. With the Government committing to net zero carbon emissions by 2050, agricultural innovation can help reduce the environmental footprint of farming and support biodiversity.

Balance needs to be struck in terms of our land use, as we face both environmental pressures and food supply challenges. This is where agricultural technology has an important part to play in supporting our farmers to produce crops with a higher yield using less land and ensuring that we meet our net zero and climate change targets.

Croplife UK believes that increased self-sufficiency and productivity can be achieved without increasing the current agricultural area of the UK. In fact, evidence would suggest that through high yielding farming³ and more efficient use of existing agricultural land, e.g., using IPM, there is potential to free up and spare land for habitat creation that will help deliver biodiversity goals.

³ Balmford, et. al. 2018. The environmental costs and benefits of high-yield farming. *Nature Sustainability* 1: 477-485