

## **Written evidence submitted by Georgina Downs of the UK Pesticides Campaign (EB77)**

### **Executive Summary**

- 1.1 It is highly noticeable that although human health and the environment are inextricably linked - particularly when it comes to the use of agricultural pesticides - and that the Environment Bill includes priority areas for regulations to be set including in relation to air quality and the listed air polluting impacts, there appears to be a total omission of any requirements for the protection of human health and the environment from crop pesticides.
- 1.2 The Environment Bill therefore does not appear to recognise in any capacity - or even have any specific reference to at all - the fact that the biggest contributor of damage, pollution, and contamination of the air, soil, water and overall environment in agricultural areas is from the continued use of pesticides and other agro-chemicals on crop fields across the UK.
- 1.3 Synthetic chemical pesticides were originally developed as chemical warfare agents in the 1930s and 1940s, but then remanufactured as agricultural pesticides. These highly toxic chemicals have been used in UK farming for around 75 years and are increasingly relied upon by conventional (ie. non-organic) farmers and growers.
- 1.4 Agriculture now accounts for more than 70% of land use in the UK, and has a major influence on our health and environment. Considering that currently only around 3% of farmland in the UK is organic, then the vast majority of the 70% of land that is used in the UK for agriculture will be land that is regularly sprayed with cocktails of synthetic chemical pesticides under the existing conventional food and farming production system.
- 1.5 There are in fact around 2,000 pesticide products currently approved for UK agricultural use. Government statistics show that in relation to just pesticides alone (ie. not including chemical fertilisers and all the other agro chemicals used in conventional farming), in 2014

the total area treated with pesticides on agricultural and horticultural crops was 80,107,993 hectares, with the total weight applied being 17,757,242 kg.<sup>1</sup>

1.6 Thus much of the perceived benefits of the proposed new Environment Bill that DEFRA is proposing simply will not materialise without concrete and definitive action on the biggest problem - that being the widespread use of agricultural pesticides and other toxic chemicals in our existing farming system - and which appears to be the Government's 'elephant in the room' with how reluctant DEFRA is to even mention it, let alone focus on it to any degree.

**1.7 The pollution and contamination of our health and environment must be stopped at the highest level, which means if such harmful farming practices are no longer permitted by Government then farmers would have to adapt and find alternative methods that do not put public health and the environment at the risk of harm.**

1.8 It cannot be stressed enough that there is no chance of restoring and enhancing the countryside environment - and the health of rural residents and communities within it - if the Government, DEFRA and the Department of Health continue to ignore the catastrophic damage that the existing chemical intensive farming system is causing to people and planet.

1.9 It is a matter of fact that there has been a total absence of any proper protection for rural residents and communities from agricultural pesticides under the existing UK standards, and indeed even under the EU regime. The really rather astonishing gaps in the approvals process and protection system have been raised by the UK Pesticides Campaign since 2001.

1.10 Even DEFRA's very own former Chief Scientist Advisor, Professor Ian Boyd. In an article in 'Science' in 2017 (when still in post in the top science job at DEFRA) issued a damning assessment of the regulatory approach worldwide for pesticides sprayed on crops including that the impacts of "dosing whole landscapes" has been ignored; and that the assumption by regulators that it is "safe" to use pesticides at industrial scales across

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<sup>1</sup> As informed by the Government's Pesticide Usage Survey Group.

landscapes “is false” and must change. He has since repeatedly advocated that agricultural pesticides need to be designed out of farming systems. When I highlighted his comments at a meeting in 2018 with DEFRA Minister George Eustice he said he agreed with that position, (not that that was reflected of course in any way, shape or form in the Government’s original draft of the Agriculture Bill nor the revised version that followed).

1.11 Further, not only are the standards on agricultural pesticides in the UK not protective of human health, but they are clearly not protective of other species such as bees and other pollinators, birds, and overall biodiversity, and nor of the wider environment in general considering the increasing evidence of damage to air, water quality, and soils.

1.12 Therefore it is quite wrong for anyone - including certain NGOs - to say the UK pesticides standards are high and fully protective of human health and the environment, as they simply are not. (And that is even before any trade deals with other countries where there is the risk of many more of these health and environmentally damaging pesticides coming in!)

1.13 The whole point of developing new UK laws and policies is the chance to review the whole system and rectify the existing flawed processes and structures. Whilst this has now not happened on pesticides in the Agriculture Bill, hopefully it will for the Environment Bill.

1.14 **Toxic pesticides and other harmful agricultural chemicals should never have been used where rural residents and communities live and breathe. Non-chemical farming methods are the only real way to protect human health and environment from harm.**

1.15 The UK Pesticides Campaign would urge the Public Bill Committee to amend the Environment Bill to reflect the health and environmental protections that are so urgently needed, including with the following crucial commitments, actions, and related amendments.

1.16 The two most important amendments to the Environment Bill would be for the insertion of new text for: 1) the urgent need to secure the protection for rural residents and communities

from agricultural pesticides; and 2) the need to adopt and utilise a truly sustainable non-chemical farming system for the overall protection of human health and the environment.

## **Amendments**

### ***1) Protection for rural residents and communities from agricultural pesticides***

1.17 There was widespread full cross party support in both the House of Lords and the House of Commons for a crucial amendment to the Agriculture Bill for the protection of rural residents and communities from agricultural pesticides. The amendment entitled “*Application of pesticides: limitations on use to protect human health,*” was for prohibiting the application of pesticides for the purposes of agriculture or horticulture near buildings used for human habitation and buildings where members of the public may be present, including but not limited to, schools, childcare nurseries, hospitals.

1.18 Such was the Parliamentary support for this amendment that it was even adopted by the House of Lords with a considerable majority at its Report Stage (see page 36 at: <https://publications.parliament.uk/pa/bills/lbill/58-01/134/5801134.pdf>). For ease of reference the full text of that House of Lords adopted amendment at Report Stage was:-

#### ***“Application of pesticides: limitations on use to protect human health***

*(1) The Secretary of State must by regulations make provision prohibiting the application of any pesticide for the purposes of agriculture or horticulture near—*

*(a) any building used for human habitation;*

*(b) any building or open space used for work or recreation; or*

*(c) any public or private building where members of the public may be present, including but not limited to—*

*(i) schools and childcare nurseries;*

*(ii) hospitals.*

*(2) Regulations under subsection (1) must specify a minimum distance from any of the locations listed under subsection (1)(a) to (c) to be maintained during the application of any pesticide.*

*(3) For the purposes of this section “public building” includes any building used for the purposes of education.*

*(4) Regulations under this section are subject to affirmative resolution procedure.”*

1.19 This new Clause was then subsequently taken out of the - House of Lords amended - Agriculture Bill by the House of Commons following a division vote on 12<sup>th</sup> October.

1.20 This was despite having full support from the main opposition party’s front benches. In fact the pesticides amendment actually received the second highest number of votes of the Lords amendments (at 212) in favour of keeping this amendment in the Agriculture Bill. Shadow DEFRA Minister, Luke Pollard reminded MPs that when it comes to agricultural pesticides it is not just a case of protecting the environment but most crucially protecting human health. Green MP Caroline Lucas made the case strongly that this amendment had to remain in the Agriculture Bill, and said that Parliamentarians “*should be standing up*” for rural residents and communities “*and protecting them*” and that “*that is what the amendment would do.*”

1.21 A revised version of the amendment was then subsequently tabled in the House of Lords (again by Lord Whitty) for reinstating into the Agriculture Bill. The revised amendment 11B can be seen at: <https://publications.parliament.uk/pa/bills/lbill/58-01/141/5801141-I.pdf> For ease of reference the full text of the revised pesticides amendment was as follows:-

***“Application of pesticides: limitations on use to protect human health***

*(1) The Secretary of State must by regulations make provision prohibiting the application of pesticides for the purposes of agriculture or horticulture near—*

*(a) buildings used for human habitation; and*

*(b) public or private buildings and associated open spaces where members of the public may be present, including but not limited to—*

*(i) education and childcare nurseries; and*

*(ii) hospitals and health care facilities.*

*(2) Regulations under subsection (1) must specify a minimum distance from any of the locations listed under subsection (1)(a) and (b) to be maintained during the application of pesticides.*

*(3) Regulations under this section are subject to the affirmative resolution procedure.”*

1.22 This revised amendment again had full cross party support across the House of Lords but unfortunately appeared to have to compete somewhat with the very high profile trade amendments and which for the House of Lords was a priority at that time. The view of numerous associated parties is that if it had not been for the trade amendments then the amendment would certainly have been adopted again by the Lords in the ping pong process.

1.23 A number of peers subsequently put on record the widespread disappointment across the House of Lords that the pesticides amendment was not reinstated into the Agriculture Bill in a separate debate on pesticides in the Grand Committee on 3<sup>rd</sup> November (related to a pesticides Statutory Instrument) and stressing the critical fact that the amendment would have protected people who live in the locality of agricultural land. These cross party peers confirmed they intended to return to this issue and related amendment for the Environment Bill, as the amendment would indeed also fit perfectly well instead in the Environment Bill.

1.24 In that same debate on pesticides in the Grand Committee on 3<sup>rd</sup> November the Minister of State for DEFRA and the Foreign, Commonwealth and Development Office, Lord Goldsmith of Richmond Park - in response to the concerns raised by cross party peers on pesticide use near people's homes - stated that "*the question of how rigorous the protections are is a valid point to make.*" Further, the Minister also went on to state that, "*Clearly, the ambition has to be that we move as far as we can away from the use of pesticides at all.*"

1.25 The fact that there has been such widespread full cross party support in both the House of Lords and the House of Commons for this crucial amendment for the protection of rural residents and communities from agricultural pesticides shows that Parliamentarians do want to see concrete and urgent action taken on this issue for public health protection. (NB. Just to point out that in addition to such cross party support, the amendment also received considerable support from various prominent groups/figures in the food and farming sector).

1.26 The dangers of pesticides can clearly be seen on the manufacturers product data sheets themselves that carry various warnings such as "*Very toxic by inhalation,*" "*Do not breathe spray; fumes; vapour,*" "*Risk of serious damage to eyes,*" "*Harmful, possible risk of*

*irreversible effects through inhalation,” “May cause cancer by inhalation,” and even “May be fatal if inhaled.”*

1.27 Cornell University’s teaching module ‘Toxicity of Pesticides’<sup>2</sup> clearly states that, *“Pesticides can: cause deformities in unborn offspring (teratogenic effects), cause cancer (carcinogenic effects), cause mutations (mutagenic effects), poison the nervous system (neurotoxicity), or block the natural defenses of the immune system (immunotoxicity).”* It goes on to warn that *“Irreversible effects are permanent and cannot be changed once they have occurred. Injury to the nervous system is usually irreversible since its cells cannot divide and be replaced. Irreversible effects include birth defects, mutations, and cancer.”*

1.28 The former Ministry of Agriculture, Fisheries and Food in a 1975 document stated that, *“The repeated use of pesticides, even in small quantities, can have cumulative effects which may not be noticed until a dangerous amount has been absorbed.”* This clear statement from 45 years ago shows that Governments’ have always been well aware of the cumulative effects of pesticides, but again no action has been taken to secure the health of rural families.

1.29 A number of recent major international reports have also detailed the damage to human health from existing industrial and chemical-intensive conventional farming systems:

- The United Nations report of the Special Rapporteur on the right to food<sup>3</sup> in March 2017 that found that chronic exposure to agricultural pesticides has been associated with several diseases and conditions including cancer, developmental disorders, and sterility, and that those living near crop fields are particularly vulnerable to exposure from these chemicals;
- The 2017 IPES-FOOD report<sup>4</sup> that outlines the unacceptable harm caused by the current chemical farming systems; exposes just some of the astronomical health costs externalized by the current system; and finds an urgent and “overwhelming case for action.” The report found that many of the severest health conditions afflicting populations around the world – from respiratory diseases to a range of cancers – are linked to industrial food and farming practices, including chemical-intensive agriculture;

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<sup>2</sup> <http://psep.cce.cornell.edu/Tutorials/core-tutorial/module04/index.aspx>

<sup>3</sup> <https://www.ohchr.org/EN/NewsEvents/Pages/DisplayNews.aspx?NewsID=21306&LangID=E>

<sup>4</sup> <https://theecologist.org/2017/oct/17/expert-panel-identifies-unacceptable-toll-food-and-farming-systems-human-health>

- The 2017 Lancet Commission on pollution and health report<sup>5</sup> on the global deaths and chronic diseases from outdoor air pollution, and which included from the use of pesticides. In fact the lead author was reported as saying that his biggest concern is the impact of the hundreds of industrial chemicals and pesticides already widely dispersed around the world.

1.30 It is therefore beyond dispute that agricultural pesticides can cause a wide range of both acute and chronic adverse health impacts. This includes irreversible and permanent chronic effects. While operators generally have protection when using agricultural pesticides - such as use of personal protective equipment (PPE), respirators, and will be in filtered tractor cabs when spraying pesticides - rural residents and communities have absolutely no protection at all from the innumerable cocktails of toxic chemicals sprayed on crop fields across the UK.

1.31 To see an example of the spraying of agricultural pesticides next to the home and garden of one family see [https://www.youtube.com/watch?v=JA-PdUjxC\\_8&feature=emb\\_logo](https://www.youtube.com/watch?v=JA-PdUjxC_8&feature=emb_logo)

1.32 Further, the exposure, risks, and acute and chronic adverse health impacts for rural residents and communities is from the actual release of harmful agricultural pesticides into the air and thus the permitted dispersal - under Government policy - of crop pesticides in the locality of homes, schools, nurseries etc. As once agricultural pesticides have been dispersed they simply cannot be controlled and are airborne droplets, particles and vapours and are present in the air irrespective as to whether there is any wind or not. Indeed volatilization (ie. vapour lift off) can occur days, weeks, even months after any application further exposing those living in the locality and which obviously has nothing whatsoever to do with wind!

1.33 Therefore this is obviously **not** about the misuse, abuse or illegal use of pesticides, but the actual **use** of agricultural pesticides in locality of areas where rural communities are present.

1.34 Scientific studies have found pesticides transported in the air at high levels, including considerable distances (ie. many miles) from where pesticides were originally applied and calculated health risks for residents and communities living within those distances. (NB. The

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<sup>5</sup><https://www.theguardian.com/environment/2017/oct/19/global-pollution-kills-millions-threatens-survival-human-societies>

UK Pesticides Campaign has a short one page briefing of study examples of pesticides in the air and the health risks for rural residents and communities that can be provided on request).

1.35 Reports of acute and chronic harm for rural residents and communities have existed for decades (see examples in the accompanying Annex 1 document) and the only way to prevent such harm occurring and protect human health is to prohibit the use of agricultural pesticides in sizeable distances in the locality of where rural communities are present, as no pesticides should ever have been permitted to be sprayed in the locality of such unprotected people.

1.36 This new Clause was therefore crucially important for securing the protection of rural residents and communities from pesticides, especially the most vulnerable groups such as babies, children, pregnant women, the elderly and those already ill and/or disabled – none of whom should ever have been exposed to these highly toxic chemicals in the first place!

1.37 During the House of Lords debate on 22 September, former DEFRA Food and Farming Minister Lord Whitty (who tabled the amendment) pointed out that the requirement within this amendment is “*vital*” to protect human beings “*primarily, residents in rural areas, by requiring spraying to be well away from homes, public buildings and places where the public are congregated. In particular, it moves towards protecting those who live, full-time, adjacent to crops that are subject to blanket applications and those who attend public spaces adjacent to such fields.*” And that it “*requires Ministers to come forward with regulations establishing a minimum distance between such applications and the buildings.*”

1.38 As Conservative peer Lord Randall of Uxbridge then stressed in the debate on 22 Sept that “*...this is about protecting human life. If we have not yet learned that people sometimes assure us that everything is all right when it patently is not, we need think only of the tobacco industry...and of asbestos. We would be failing ourselves, the public and our fellow human beings if we did not recognise the harmful nature of pesticides...However, one thing we can do is to get this amendment into the Bill, because it would protect so many people.*”

1.39 As the Shadow Spokesperson for the Environment, Food and Rural Affairs, Baroness Jones of Whitchurch then made clear in the debate “*This is an immediate issue of public health protection.*”

1.40 Indeed there are now nearly 12,400 people – the majority of which are affected rural residents in the UK – who have signed the ongoing petition<sup>6</sup> to the Prime Minister and DEFRA Secretary that calls for the same protective measures that were contained in the pesticides amendment to the Agriculture Bill. The petition has been supported by a number of prominent figures including Hillsborough QC Michael Mansfield, the Prime Minister’s own father Stanley Johnson, Jonathon Porritt, Gordon Roddick, DEFRA non-executive board member Ben Goldsmith, Caroline Lucas MP, Michael Watt, amongst many others.

1.41 The UK Government’s stated position that pesticides are strictly regulated and scientific assessment shows that there are no risks to people and the environment is simply not correct considering that since 2009 EU Regulation 1107/2009 in Article 3, paragraph 14 (along with the UK equivalent laws) have legally defined rural residents living in locality of pesticide sprayed crops as a “*vulnerable group*” recognised as having “*high pesticide exposure over the long term,*” and further, the risks of both acute and chronic adverse health effects of such exposure is again recognised in Article 7 of the Sustainable Use Directive 2009/128/EC.

1.42 Rural residents are thus clearly at high risk of harm and yet EU and UK equivalent laws stipulate that there must be **no** harm to human health in any capacity.

1.43 High quality, peer-reviewed scientific studies and reviews (eg. <https://www.sciencedirect.com/science/article/pii/S0041008X13000549>) have concluded that long-term exposure to pesticides can damage the function of different systems in the body, including nervous, endocrine, immune, reproductive, renal, cardiovascular, respiratory

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<sup>6</sup><https://www.change.org/p/the-prime-minister-rt-hon-boris-johnson-mp-ban-all-crop-spraying-of-poisonous-pesticides-near-our-homes-schools-and-playgrounds>

- 1.44 Such studies have concluded that exposure to pesticides is associated with a wide range of chronic diseases including, cancers of the breast, prostate, lung, brain (and childhood brain cancer), kidney, testicles, pancreas, stomach, bladder, bone, as well as non-Hodgkin's lymphoma, multiple myeloma, soft tissue sarcoma, leukaemia, (and childhood leukaemia).
- 1.45 Other chronic health impacts that pesticides have been associated with in studies include, birth defects, reproductive disorders, neuro degenerative diseases (including Parkinson's, Alzheimer's, Amyotrophic lateral sclerosis), cardio-vascular diseases, respiratory diseases, diabetes, chronic renal diseases, autoimmune diseases (rheumatoid arthritis, systemic lupus).
- 1.46 The economic costs of the health conditions pesticides can cause are massive. Obviously it goes without saying that the personal and human costs to those suffering chronic diseases/damage, and the impacts on all those around them, cannot be calculated in financial terms.
- 1.47 Yet if such harmful agricultural pesticides were not sprayed in locality of residents' homes, schools etc. then such pesticide related health conditions would clearly be preventable.
- 1.48 Even based on the acute effects reported by rural residents and which the Government itself already monitors (albeit wholly inadequately) and records cases on (including acute effects such as chemical burns to the eyes and skin; rashes and blistering; damaged vocal chords; difficulty swallowing; respiratory irritation; breathing problems; asthma attacks; headaches, dizziness, nausea; vomiting; stomach pains; flu-type illnesses; and aching joints), then immediate action is supposed to be taken, as any reports of any adverse health effects, whether they are acute or chronic, are not supposed to just be accepted by the Government when pesticide laws clearly require there to be "no harmful effect" on human health.
- 1.49 Further, as DEFRA Minister Lord Gardiner said during the Committee Stage debate in the House of Lords (when referring to a different issue, to do with diet and healthy eating) it is important that people are in the best health possible considering Covid 19 - as anyone with underlying health conditions is susceptible to the virus - and yet agricultural pesticides are already known to cause damage to the immune system, respiratory system, nervous system

etc. Thus action to protect rural residents and communities is also vital in the current climate of Covid-19 of needing people to be in the best possible health and not compromised from exposure to synthetic pesticides and other agro chemicals that are harmful to human health.

1.50 The principal aim of pesticide policy is supposed to be the protection of public health and the environment. This is meant to be the number one priority and take absolute precedence over any financial, economic or other considerations. Therefore the overriding duty of the Government is supposed to be the protection of citizen's health and lives, especially those most vulnerable. Yet this has clearly not happened to date for pesticides, as although DEFRA continues to *maintain* that pesticides policy is aimed at providing a high level of protection for people and the environment, it has continued to fundamentally fail to deliver that high level of protection for either people or the environment in reality and in practice.

1.51 The crucial pesticides amendment is urgently needed and would provide protection for rural residents and communities to secure the health of this highly vulnerable exposure group.

1.52 Obviously whilst the damage to the health and lives of so many residents that has already occurred cannot be fixed, the Government can prevent further damage from occurring by taking the necessary action to protect rural residents and communities from pesticides harm.

1.53 It is important to stress that this amendment is a necessary and crucial public health protection measure that has been urgently needed to be introduced for decades. Indeed the UK Pesticides Campaign has campaigned for it both here in the UK and in the EU since 2001 (as the EU regime also still does not properly protect rural residents and communities from pesticides). Therefore it is completely immaterial what side of the Brexit fence one is sat when it comes to this particular amendment, as it is a measure that was needed to be introduced when the UK was in the EU and a measure just as needed now we are out.

## ***2) Non-chemical farming for the overall protection of human health and the environment***

1.54 Please note that I did have saved somewhere a suggested amendment for this second section but have misplaced it and simply cannot find it anywhere! Therefore in the absence of the

specific suggested amendment text (which I shall carry on looking for and send on separately if I locate it!) then I shall just detail the brief summary overview of this section.

1.55 As is evident from what is detailed throughout this written evidence, the problem with agricultural pesticides certainly will *not* be solved by merely *papering over the cracks* as the whole core foundations and structure on which the current UK policy operates is inherently flawed. For example, it would not solve the deep seated and fundamental problems that exist by merely *reducing* the use of pesticides, as just one single exposure can lead to damage to the health of any rural residents or others exposed. Further, the pesticides reduction targets advocated by NGOs and that were previously set in France, along with a pesticides tax, have not worked - and have wasted the last 10 years - as agricultural pesticide use in France has overall increased! Those NGO organisations pushing for the mere *reduction* of pesticides also sends the wrong message as it implies that it is okay to use them but just less when it was never ok to use highly toxic chemicals in our food production system and certainly not for spraying in the locality of all of us unprotected rural residents and communities.

1.56 Nor will the problems with pesticides be solved by Integrated Pest Management (IPM) - which I note has been advocated by DEFRA and NGOs as a way forward - as IPM still uses pesticides to some degree whichever definition one goes by. Many conventional farmers insist they already adopt IPM practices, even though they are still spraying mixtures of pesticides on a regular basis, year after year, on crops across the UK. So in *reality* and in practice, IPM is simply a red herring as it's not going to fundamentally change anything.

1.57 I would just add that the fact that the former DEFRA Chief Scientific Advisor, Professor Boyd, has advocated removing agricultural pesticides completely from our food and farming systems (as pointed out earlier at para 1.10) is notably a far more stronger stance than that coming from any of the environmental organisations and other NGOs and/or farming bodies.

1.58 This problem is also not going to be solved by merely substituting one pesticide for another. Particularly as historically once one pesticide has been withdrawn another toxic chemical will just be introduced in its place. How does that solve anything? It doesn't!

1.59 Further, it is now way past the stage of just monitoring the health and environmental impacts of pesticides (and especially when more than enough evidence already exists of such widespread harm from agricultural pesticides), as such harm actually needs to be prevented from occurring in the first place. Just to add that regarding monitoring, under existing pesticide laws no pesticide is supposed to be approved for use if it has not been established that there will be no immediate or delayed harm to human health. Therefore it should not be the case that toxic chemicals are approved and then monitoring reports the damage, but that any chemical that poses a risk to human health is not approved in the first place. The principal aim of pesticide policy is clearly based on the risk of harm - not that harm has to have already occurred - and so no one should be put at risk of harm from pesticides. If there is harm to health - which of course there is - then the necessary action is supposed to be taken by the Government to immediately stop that harm (eg. by prohibiting use) and not just *reducing* such harm, as certain NGOs have continued to wrongly state and advocate.

1.60 As said, the catastrophic and devastating impacts of agricultural pesticides on, not just human health, but on birds, bees, and other wildlife, and the wider environment, really needs to be prevented and eliminated altogether with the widespread adoption and utilisation of truly sustainable NON-chemical farming methods (such as crop rotation, physical and mechanical control, and natural predator management). Therefore a complete paradigm shift to move away from the use and reliance on such harmful chemicals is urgently needed.

1.61 This would obviously be more in line with the objectives for sustainable food and farming, as the usage of complex chemicals designed to kill plants, insects or other forms of life, cannot be classified as sustainable. The huge external costs of pesticide use would also be eliminated if agricultural policies are fundamentally shifted towards utilizing non-chemical farming methods. Further, the fact that previous research has shown that more than 3,000 pest species have developed resistance to at least 300 types of insecticide ingredients<sup>7</sup> yet further supports the urgent need for a different non-chemical approach for food and farming.

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<sup>7</sup> Hardy, M.C., 'Resistance is not futile: it shapes insecticide discovery'. *Insects*, 2014, 5(1): p. 227-242

1.62 Yet the adoption of non-chemical methods was not included in the Agriculture Bill and so again the UK Pesticides Campaign hopes the Environment Bill will be amended to do so.

1.63 Considering the very significant damage that the use of agricultural pesticides has caused then the strategic aim must be to move away from chemical pesticides to a health and environmentally sustainable crop protection utilising non-chemical farming methods.

1.64 It is also important to point out that the existing EU laws - both EU Regulation 1107/2009 and EU Directive 2009/128/EC of 21 October 2009 - have various provisions and requirements for non-chemical methods and thus this is an area that the UK **must** prioritise.

1.65 The aforementioned 2017 UN Report of the Special Rapporteur on the right to food concluded that the agro-chemical industry has continued to falsely maintain that damage will be caused to agriculture and food production if pesticides are not used. The report stated that *“The assertion promoted by the agrochemical industry that pesticides are necessary to achieve food security is not only inaccurate, but dangerously misleading. In principle, there is adequate food to feed the world; inequitable production and distribution systems present major blockages that prevent those in need from accessing it.”* In fact, rather than there not being enough food there is actually a huge amount of food wasted every year. One UK report found that as much as half of all worldwide food produced ends up as waste, which is a whopping 2 billion tonnes every year!<sup>8</sup>

1.66 The 2017 UN report concluded moving away from pesticide-reliant industrial agriculture to non-chemical farming methods should now be a political priority in all countries globally.

1.67 As pointed out at paragraph 1.24 earlier, in the debate on pesticides in the Grand Committee of the House of Lords on 3<sup>rd</sup> November, the Minister of State for DEFRA and the Foreign, Commonwealth and Development Office, Lord Goldsmith of Richmond Park made references - indeed repeatedly - to shifting away from pesticides altogether so not using

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<sup>8</sup> The UK's Institution of Mechanical Engineers 2013 report, '*Global Food; Waste Not, Want Not*'.

them at all. For example: *“Clearly, the ambition has to be that we move as far as we can away from the use of pesticides at all”; “The noble Lord, Lord Berkeley, made a powerful case for a shift away from pesticides towards cleaner systems, and he is right. That clearly has to be the ambition of any responsible Government. We want to minimise and eventually phase out the use of pesticides, and that means adopting different forms of food production over time”; “The noble Baroness, Lady Bennett, talked more broadly about the need to shift our food production away from the use of pesticides. Again, I strongly agree with her and refer her to my answer earlier to the noble Lord, Lord Berkeley”; “A lot of work is under way to research, develop and promote means to move away from chemical pesticides.”*

1.68 The new post Brexit UK Environment Bill and policy provides a real opportunity for the UK to clean up agriculture once and for all and urgently adopt a non-chemical farming policy in order to no longer use toxic chemicals in the production of food. This would then protect not only the health of rural residents and communities, as well as other members of the public, but also the environment, wildlife, pollinators, and other species.

1.69 The origins of traditional farming methods did not include dependence on chemical inputs for mass production. Such poisons should never have had any place in the air we breathe, food we eat, and the environment we live in. Therefore, as said, it is a complete paradigm shift that is needed to move away from the use of pesticides in farming altogether. Such a move is absolutely integral to the health and existence of all those living in the countryside, as well as other species that are being wiped out from continued use of such toxic chemicals.

1.70 The new Environment Bill and related policy provides a real opportunity for change.

### **UK Pesticides Campaign**

1.71 The UK Pesticides Campaign<sup>9</sup> was founded in 2001 and is the only representative national campaign in the UK specifically for rural residents and communities affected by agricultural pesticides sprayed in the locality of our homes, schools, nurseries, among other areas.

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<sup>9</sup> [www.pesticidescampaign.co.uk](http://www.pesticidescampaign.co.uk)

- 1.72 The campaign highlights the exposures, risks, and acute and chronic adverse health impacts of pesticides on rural residents and communities, as well as on other members of the public.
- 1.73 I myself, as Founder/Director of the campaign, have lived next to regularly sprayed crop fields for over 35 years, and I therefore have the direct experience of living in this situation.
- 1.74 The UK Pesticides Campaign was the first to identify and expose in 2001 the flaws in the Government's risk assessment policy approach, in that there was no risk assessment undertaken for residents exposure - only a short term assessment for bystanders - prior to the approval of any pesticide, and yet it has always been a legal requirement under EU law.
- 1.75 As a result of the UK Pesticides Campaign's representations on the issue - there is now a named residents assessment, but it is really in name only as it simply does not reflect the real life exposure of rural residents to agricultural pesticides. For eg. i) the risk assessment is predictive *only* and based on a mere mathematical model and, as which, has never reflected the real life exposure scenario of rural residents; ii) still no account is taken in the risk assessment of pesticide mixtures as the risk assessment is based on exposure to just one *individual* pesticide at a time which is of course again not the reality of crop spraying in the countryside where there can be exposure to innumerable mixtures and cocktails of pesticides from each spraying application (and so even just based on that one flaw alone then the assessment is not worth the paper it is written on); iii) the flawed assumptions of the exposure durations for the limited number of exposure factors considered; iv) no account is taken of babies, and the list goes on. Therefore it still does not cover the overall exposure in totality and in reality for residents from the mixtures of pesticides sprayed regularly on multiple fields in the locality of rural residents' homes, schools, playgrounds, hospitals etc.
- 1.76 The UK Pesticides Campaign representations have led to a number of significant campaign victories and achievements in both the UK and in Europe including, amongst others:

### *In Europe*

- Stronger requirements for the protection of rural residents in EU laws (both EU Regulation 1107/2009 and Directive 2009/128/EC), in particular ensuring residents are now legally defined as a “*vulnerable group*” recognised as having “*high pesticide exposure over the long term*”;
- Ensuring that new exposure and risk assessment specifications for rural residents, as well as bystanders, are included in, most importantly, EU Commission Regulation 284/2013;
- Prompting the development of Guidance from the European Food Safety Authority on assessment of exposure for operators, workers, residents, bystanders, in risk assessment for pesticides.

### *In the UK*

- Ministers requesting two Government consultations on pesticides in 2003<sup>10</sup> and 2010<sup>11</sup>;
- Ministers requesting a Royal Commission on Environmental Pollution inquiry and report<sup>12</sup> and as a result of the UK Pesticides Campaign’s expert status on the issue the Royal Commission invited the campaign to give a number of presentations during its inquiry, as well as being asked to be one of its peer reviewers of that report. The RCEP concluded rural residents are not protected from pesticides, albeit some of its recommendations fell way short for protecting rural residents;
- Following the landmark High Court victory in 2008 against the then Government<sup>13</sup> - which concluded that rural residents are not protected from agricultural pesticides and that there was “*solid evidence that residents have suffered harm to their health*” - the then Government requested two working groups (BRAWG which considered the status of exposure and risk assessments, and PAHES which considered the status of human health monitoring) to review the policy and approach on the use of pesticides in the UK. This led to DEFRA Ministers confirming publicly an acceptance of the various recommendations made. Yet to date the majority of those recommendations were never actually implemented and were not adequate enough in any event;

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<sup>10</sup><https://webarchive.nationalarchives.gov.uk/20070102031624/http://www.defra.gov.uk/corporate/consult/spraydrift/index.htm>

<sup>11</sup><https://www.independent.co.uk/news/people/news/georgina-downs-britains-erin-brockovich-1900546.html>

<sup>12</sup>[https://ipfs.io/ipfs/QmXoypizjW3WknFiJnKLwHCnL72vedxjQkDDP1mXWo6uco/wiki/Georgina\\_Downs.html](https://ipfs.io/ipfs/QmXoypizjW3WknFiJnKLwHCnL72vedxjQkDDP1mXWo6uco/wiki/Georgina_Downs.html)

<sup>13</sup><https://www.dailymail.co.uk/news/article-1085704/Pesticide-nun-wins-landmark-battle-dangerous-chemicals-spread-fields-near-homes.html>

- Widespread cross party support in both the House of Lords and House of Commons for a crucial amendment to the Agriculture Bill for the protection of rural residents and communities from pesticides, including inclusion (on page 36) at Report Stage<sup>14</sup> in the Lords (see further above).

1.77 The UK Pesticides Campaign was also asked by the Environmental Audit Committee to provide both written evidence, and two sessions of oral evidence, to the committee members on pesticides and human health during its 2012/2013 inquiry on pesticides and bees.<sup>15</sup>

1.78 The work of the UK Pesticides Campaign is widely recognised both nationally and internationally,<sup>16</sup> and has led to a considerable number of prestigious environmental awards and nominations.<sup>17</sup> The work of the UK Pesticides Campaign has also led to recognition by an independent international political research centre in Washington DC.<sup>18</sup>

1.79 I myself have also been a registered journalist under both the International Federation of Agricultural Journalists and British Guild of Agricultural Journalists since 2006.<sup>19</sup> The following are just a few of the most recent articles relating to the Agriculture Bill and policy:

- May 2018 - Article in *Green Times* summarising the key campaign submission to the DEFRA Consultation (that preceded the Agriculture Bill) entitled “*Pesticides and human health: the UK*

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<sup>14</sup> <https://publications.parliament.uk/pa/bills/lbill/58-01/134/5801134.pdf>

<sup>15</sup> <http://pesticidescampaign.co.uk/evidence.htm?LMCL=R7yjXS>

<sup>16</sup> The work of the UK Pesticides Campaign has been featured in national and international media since 2002. Examples of national media coverage include: in the Times, Sunday Times, Financial Times, Guardian, Observer, Daily Telegraph, Sunday Telegraph, Daily Mail, Daily Express, Daily Mirror, Independent, Independent on Sunday, Metro; as well as on a number of BBC TV and radio programmes (including BBC News, Politics Show, Countryfile, The Food Police, Radio 4's: Today programme, Woman's Hour, You and Yours, PM, The World at One, Costing the Earth; BBC World Service, BBC Radio 5 Live); ITV and Channel 4 programmes (including ITV News, Channel 4 News); and on Sky News. In relation to international media coverage, articles that have featured the work of the UK Pesticides Campaign have appeared in, amongst others, the US (including CNN), Canada, Australia, New Zealand, France, Germany, Portugal, India, and The Beijing News in China. In addition a diverse range of magazines have also featured the work of the campaign including: Cosmopolitan, Marie Clare, Grazia, Red, Vogue, Ecologist, Counterpunch, Independent International Political Research Center, Resurgence, Private Eye, Science in Parliament, Country Living, The Big Issue, New Consumer, Easy Living, Ethical Living, Landworker, Positive Health, among others. The work of the campaign has also been featured in a number of books including “*The Vitamin Murders*” by James Fergusson; “*Scared to Death*” by Christopher Booker and Richard North; “*People Power*” by Jon Robins and Paul Stookes.

<sup>17</sup> Some of the awards and nominations can be seen at:

[https://ipfs.io/ipfs/QmXoypizjW3WknFiJnKLwHCnL72vedxjQkDDP1mXWo6uco/wiki/Georgina\\_Downs.html](https://ipfs.io/ipfs/QmXoypizjW3WknFiJnKLwHCnL72vedxjQkDDP1mXWo6uco/wiki/Georgina_Downs.html)

<sup>18</sup> <http://www.iiprc.org/experts.html>

<sup>19</sup> <https://www.ifaj.org/eco-award-uk-writer/>

government's 'elephant in the room'" at: <http://thegreentimes.co.za/pesticides-and-human-health-the-uk-governments-elephant-in-the-room/>

- 21st September - Article in Natural Health News entitled "Will the UK House of Lords "do the right thing" and vote in favour of protecting rural residents from toxic pesticides?" <https://www.naturalhealthnews.uk/environmental/will-the-uk-house-of-lords-do-the-right-thing/>
- 10th October - Article in Natural Health News entitled "Will the House of Commons now "do the right thing" and vote to protect rural residents from toxic pesticides?" at <https://www.naturalhealthnews.uk/environmental/will-the-house-of-commons-now-do-the-right-thing/>

1.80 I have also attached Annex 1 containing a select few examples - from the many thousands - of other rural residents from across the UK adversely affected by agricultural pesticides sprayed in their localities (as taken from underneath the petition referred to above).

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*11th November 2020*