Brighthelm Centre
North Road
Brighton
BN1 1YD
Tel +44 1273 964230
admin@pan-uk.org
www.pan-uk.org

PESTICIDE ACTION NETWORK *UK*

An independent body working to eliminate the hazards of pesticides

Pesticide Action Network UK response to consultation on -
Health and Harmony: the future for food, farming and the environment in a Green Brexit

Brexit is a once in a generation opportunity to develop a productive, sustainable UK agricultural system that will not only provide high-quality produce for the people of the UK but deliver ongoing, long-lasting benefits for the environment and biodiversity that can be enjoyed by future generations. The proposals put forward in the Defra Health and Harmony Command Paper set some encouraging and ambitious objectives. However, whilst the document is welcome as a statement of intent, it lacks detail on how these noble goals might be achieved. This submission, therefore, aims to provide a greater level of detail on actions the government might take to better protect people and environment from the harmful impacts of agricultural pesticides, and encourage the shift to non-chemical alternatives.

Pesticide reduction: a key strategy for achieving sustainable agriculture in the UK

There is no doubt that pesticides are one of the main contributing factors to the most damaging effects of our current agricultural system. They have played a major role in the ongoing declines of insect species, including bees and other pollinators, and farmland birds. The use of pesticides is also polluting water bodies throughout the UK and is a contributing factor in the loss of agricultural soil fertility. The overuse of herbicides is having deleterious effects on the diversity of wild plant species. These problems persist despite years of industry initiatives and the employment of voluntary measures to prevent the harms caused by pesticides to the UK's biodiversity and environment.
Meeting the objectives for food, farming and the environment put forward in the Health and Harmony Command Paper can only be achieved if there is a clear, detailed strategy for reducing UK pesticide use. In fact, without creating both strong disincentives for using pesticides and, in parallel, strong incentives for switching to non-chemical methods of pest control, many of the goals outlined in the Command Paper will remain unachievable.

From PAN UK's perspective, the three most glaring omissions are:-

- how the UK is going to address the environmental problems associated with the use of pesticides,
- how it will go about increasing the uptake of genuine Integrated Pest Management (IPM) amongst UK farmers, and
- how it will support and encourage expansion of the organic sector.

All three areas are mentioned very briefly but without consideration of how they could contribute in any significant way to developing the vision that is set out in the Command Paper.

If we are to make our farming sector more sustainable, it is essential that pesticide reduction and the support, development and uptake of real IPM and organic should form the backbone of UK agriculture policy. The benefits of reducing the use of pesticides go beyond improvements to biodiversity, the environment and human health; they can also help increase incomes for farmers by reducing input costs without reducing yields. In fact pesticide reduction can be seen as a win-win situation for everybody.

With that in mind, and based on PAN UK's three decades' of expertise and experience working on limiting the harms caused by pesticides and promoting non-chemical alternatives, the recommendations outlined in this submission focus on positive solutions that would enable the government to meet its stated goals.

UK pesticide use is rising – what is the current situation?

There is a common misconception that the amount of pesticides used in the UK has fallen – indeed some groups claim it has halved since 1990. This is **not** the case. It is important to appreciate that, in many cases, and by most internationally accepted measures, UK pesticide use is rising as is our exposure to their harmful impacts. In fact, since 1990, the exposure of the UK public and environment to pesticides has increased in the following ways:

1. The toxicity of pesticides has increased over time so that less chemical is required in terms of weight but the damage to the environment remains the same or, in some cases, worse.
2. The area of land being treated with pesticides has increased
3. The number of times crops are treated with pesticides has increased
4. The variety of different pesticides being used on particular crops has increased

Therefore measures to decrease pesticide use are badly needed and the UK's new Agriculture Bill is the perfect policy vehicle to drive a reduction.

For more information on UK pesticide use, see the PAN UK briefing 'The Hidden Rise of UK Pesticide Use' attached as an annex to this submission.

Specific recommendations on measures to be included within the Agriculture Bill

PAN UK has a number of recommendations for inclusion into both the future Agriculture Bill and the UK's ongoing strategy for greening our agricultural system. Below we outline our three key policy recommendations;

- **i)** Introduce a clear quantitative target for reducing the overall use of pesticides in agriculture.
- **ii)** Create a new government body to assist with the development and dissemination of Integrated Pest Management (IPM) techniques to UK farmers
- **iii)** Introduce a pesticide tax or levy that would act as both a driver for reducing pesticide use and assist in funding pesticide reduction mechanism including but not limited to a newly-created IPM body.

i) **Pesticide-use reduction target** - An overall strategy for reducing the quantity and frequency of pesticide application coupled with a robust system for monitoring usage

PAN UK is proposing that, as part of the post-Brexit UK approach to pesticide regulation, a clear quantitative target for an overall reduction in the use of pesticides in the UK is set. This will help to prevent potential harms caused by pesticides to both the environment and the health of UK citizens. The setting of a target would also help to provide UK farmers with certainty as to the government's direction of travel in terms of pesticide use, enabling them to make long-term decisions.

As with other issues such as carbon emissions and landfill waste, setting clearly defined targets is already recognised as a key policy vehicle for establishing aspirations, driving a range of specific improvements to be implemented, and helping to coordinate the activities of multiple stakeholders

around a single purpose. It would help consolidate the wide range of existing government activities on pesticides, ensuring that they deliver outcomes that are more than the sum of their parts. As per the recommendations in the 2017 paper by DEFRA chief scientific adviser Professor Ian Boyd, the monitoring required to assess progress on meeting a reduction target would improve our understanding of how pesticides affect the environment at a landscape-scale and enable us to design regulation accordingly.

Setting a target for reducing pesticide use would also help to drive innovation in non-chemical pest and disease control techniques. It would help support the development and uptake of IPM techniques and stimulate support for the organic sector as a way of meeting the reduction targets.
Other countries have already adopted national pesticide reduction targets. In 2008, France made a commitment to halve overall pesticide use by 2018. It announced this as part of the Ecophyto 2018 plan and aimed to monitor progress by evaluating three quantitative indicators: Number of Unit Doses (NODU); quantity of active ingredient; and Treatment Frequency Index. This is an ambitious plan and it is not yet clear if France will meet its overall target. However, early analysis reveals progress is being made in some areas, most notably soft wheat. The introduction of a clear reduction target has enabled a wide range of measures to be implemented and the overall policy framework to align in order to work towards this common goal.

In 2011, Denmark adopted a target for an overall pesticide use reduction of 40% and research suggests this target has been met. The key reason for the success appears to be the introduction of a pesticide tax at 34-55% of sale price. As in the case of France, the target has been a driver for innovation in non-chemical methods of pest control and in identifying effective mechanisms for pesticide use reduction.

There are a number of ways in which reduction targets could be introduced and targeted at particular areas of concern. Introducing reduction targets for specific active substances identified as high-risk to biodiversity, water quality, soil fertility, operator health or more widely human health would be a priority. Further reduction targets should also be adopted for active substances where there are developing issues of resistance or efficacy.

ii) Support and development of Integrated Pest Management (IPM) – a new independent body for research, development and dissemination of IPM techniques

It is often claimed that the majority of farmers in the UK are using IPM. However, whilst it is true that many UK farmers may be using one or two techniques that can be considered part of IPM practice, to state that IPM is fully adopted is false.

In fact, IPM is a complete system that employs a range of different approaches with the use of chemicals being the absolute last resort for a farmer when, and only when, prevention and non-chemical measures have failed. Our current system of pesticide use, which in many cases includes both prophylactic and insurance application, does not meet the standards of any definition of IPM.
PAN UK has identified two immediate needs for increasing the uptake of IPM. Firstly, the UK must develop and adopt a clear definition of what constitutes IPM and, crucially, what practices cannot be counted as IPM. This is particularly important with regards to the new Environmental Land Management scheme. If we are to deploy 'public money in return for public goods' it is vital that only farmers working hard to reduce their pesticide use and employing genuine IPM techniques are able to access public funds in return. Secondly, if the UK is serious about increasing the uptake of IPM then there is no single intervention that would have as much impact as the creation of an independent research and advice facility for farmers and agronomists.

Research and innovation is clearly an important issue in the drive to develop a more sustainable agriculture system. The UK has for many years seen a dramatic decrease in research facilities for farmers and there is currently no effective advice or extension service available for farmers wishing to adopt IPM and start moving towards reducing, and ultimately eliminating, their use of pesticides.
In countries such as Denmark where there are extension and training services available to farmers, there has been successful uptake and adoption of IPM and other techniques that have reduced the chemical burden on the environment. Farmers need to be able to access training and research that reflects their specific needs.

Any advice, information and training given to farmers must be truly independent and driven by an IPM agenda that is working toward reducing pesticide inputs across the board and meeting any reduction targets that have been set. An independent government run and funded IPM research and development body would be a valuable asset in the move toward a truly sustainable UK agriculture.
Organic agriculture can be viewed as the gold standard of IPM and, as such, there is much that can be learned from organic agricultural systems. Knowledge and information exchange between organic and non-organic farmers should form a distinct element of the new IPM body that PAN UK is proposing.

Ongoing government support for farmers to switch to organic should be seen as an essential inclusion in any future Agriculture Bill and as a key measure for meeting pesticide use reduction targets. Incentivising farmers to adopt IPM, or convert to organic, using payments that replace the current CAP subsidies would ensure that public money is being put towards delivering public goods.

iii) A pesticide tax - funding to support an IPM research and extension service

In order to fund a new IPM body, the notion of introducing a pesticide tax should be considered. This would be in line with maintaining the 'polluter pays' principle and has been proven to be an effective tool for helping to reduce the use of pesticides in a number of other countries.

In Denmark, the levels of tax applied to pesticides are differentiated by the potential that each substance has for harming the environment or human health. The most toxic, or those that drive the most damaging impacts such as contaminating water courses, have the highest rate of tax applied to them. This provides farmers with a financial incentive to use pesticides that are the least toxic while ensuring that those substances that present the greatest risk to the environment are made to pay for it – the 'polluter pays' principle.

The benefits of this particular approach are threefold; it incentivises the use of the least toxic or harmful pesticides, drives innovation in developing non-chemical approaches, and provides funds to pay for the development of an IPM advisory body to reduce farmers' reliance on pesticides.

As a part of a pesticide reduction strategy a pesticide tax can be a very useful tool. It is to be assumed that there will be some reduction in money available for farm payments following the loss of CAP payments and revenues raised from a pesticide tax could help to meet any shortfall while delivering public goods and a more sustainable UK agricultural system.

Conclusions

Brexit and the promise of a new Agriculture Bill is a real opportunity for the UK to develop and deliver a truly sustainable agricultural system that will benefit everybody – farmers, consumers, the general public and the environment of the UK – now and for generations to come.

There is a need to be bold and for the Agriculture Bill, that will form the backbone of our new agricultural system, to contain measures that will truly deliver health and harmony. The UK must avoid at all costs the pitfalls of the CAP which has driven the destruction of so much of our natural world while paying lip service to environmental protection.

The thread running through all of this is pesticides. Their use and the effects that they have on human health and the environment must be tackled if we are going to make any meaningful headway on delivering a new 'greener' agriculture. This cannot be left to voluntary measures or market forces, the government must drive this change and support UK farmers, both financially and with appropriate research and advice, to adopt non-chemical methods of pest control. Using public money to reward farmers for reducing their use of pesticides would truly be delivering a public good.