



Sustainable Use of Pesticides: less is not always better

Agriculture and Progress' views on the upcoming revision of the Sustainable Use of Pesticides Directive

The Sustainable Use of pesticides Directive (SUD) was adopted in 2009 with the aim of reducing the risk and impacts of the use of pesticides on human health and the environment. Integrated pest management (IPM)¹ is a key concept of the SUD and includes actions like crop rotation, pest monitoring and adoption of non-chemical pest control techniques and less hazardous pesticides.

As part of the European Green Deal, the Commission's Farm-to-Fork strategy highlights the need for shifting to a fair, healthy and environmentally-friendly food system, while also stressing the importance of improving the position of farmers in the value chain. The strategy proposes amongst others a 50% reduction of the use of chemical pesticides by 2030.

Based on a leaked drafts, the Sustainable Use Directive (SUD) would be transformed into a Sustainable Use Regulation (SUR). As a Regulation, it will apply directly in Member States to guarantee better and more harmonised implementation. The leaked drafts seem to put a lot of responsibilities and actions on Member States, leaving them some leeway on setting the targets at national level, even though a binding reduction target would be set at EU level.

For farmers, it seems a **very rigid system with binding elements would be set up, allowing next-to-no flexibility in the choice of agricultural instruments** and only allowing use of chemical pesticides when all other options, that would need to be checked one by one, would be deemed not satisfactory to combat pests. Unfortunately, the new SUR, if it stands, seems to have very limited confidence in the capabilities of farmers to make adequate choices, giving furthermore the impression that farming communities all too often opt for the 'easy option' of pesticide use, which is in opposition to reality.

The question of how this will **impact the competitiveness of the agricultural community and of the primary food processors** needs to be raised as well. Important trading blocs worldwide impose nowhere near the same stringent rules on their producers. European producers are expected to compete with products imported from these trading blocs. The level-playing field is inexistant and the changes introduced with the new SUR will only further deteriorate the competitive position of EU producers. To remedy this situation, the implementation of **mirror measures**, aiming to impose the same conditions on imported products compared to EU products, is essential if the EU is serious about keeping a sustainable and competitive agricultural and primary food processing sector that is ultimately producing good quality food for the benefit of European society and beyond.

The Agriculture and Progress Platform would like to emphasise some key elements that in our view should be taken into account in the context of the upcoming SUR to guarantee a viable environment for notably farmers and primary food processors.

¹ IPM is defined by the FAO as "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".

Achievements in terms of sustainability via a coherent implementation of Integrated Pest Management: we do not start from scratch

Reducing the use of plant protection products (PPPs) is an objective that maize and beet growers have set themselves already years ago by committing to IPM. This has in turn led to the use of techniques that have a positive effect on biodiversity such as optimising crop rotation, decision-making tools for farmers, precision agriculture, and the use of pelleted and treated seeds. The latter notably allows for a much more targeted use of PPPs, thereby limiting their use. Other benefits include avoiding spraying after crop emergence and tackling target organisms while having no or little effect on non-target organisms. Developments with regards to robotics and digital farming are also extremely promising.

As such, IPM is widely implemented across Europe for the cultivation of these crops and is closely integrated with daily farming practices. For example, every beet growing Member State has a national IPM plan containing measures and recommendations regarding sustainable sugar beet growing, developed by the sugar beet sector in collaboration with research institutes, using crop rotation, variety selection, treated seed, seed priming, integrated weed management (IWM) and integrated pest & disease control in order to minimize the use of crop protection products.

Also, seed treatment has become a well-established (40+ years) and safe technology which fits strategically within an IPM approach by precisely, effectively, efficiently and sustainably combating pests & diseases, taking into account the presence of harmful organisms in the environment and during critical stages of crop growth.

The Agricultural and Progress Platform underlines that **IPM is an excellent tool for sustainably managing agricultural production. It should be broadened and extended, and the boundaries should be clearly set while taking due account of reality and feasible practicality in the fields. Decision-makers should nevertheless put confidence in farmers that they would apply IPM adequately, without imposing endless and non-feasible rules and conditions to deliver as well as undue administrative burdens.**

Reduction targets must undergo thorough environmental and economic impact assessments

It is crucial to **assess the environmental and economic impacts ahead of specifying any objectives or reduction targets in a given timeframe.** This is notably the case for the objective of 50% reduction of chemical PPP use by 2030, as proposed in the EU Green Deal. The varying national baselines should sufficiently be taken into account. Furthermore, it should be kept in mind that farmers must be in a position to react to different climatic conditions, which vary from year to year.

The following elements in particular should, be considered and evaluated carefully:

- the availability of alternatives,
- the effectiveness of alternatives (i.e., do these alternatives provide satisfactory control of harmful organisms),
- the cost of such alternatives (in terms of additional input costs and/or lower yield?),
- the impact of not using a PPP for which there are currently no alternatives which provide satisfactory control of harmful organisms.

European farmers need a functional toolbox to combat pests and diseases

Any regulatory framework with regards to PPPs must be realistic and science-based as this is the only viable foundation to build long-term, sustainable policy for generations to come. Agronomic dead-end situations in which farmers are left without effective solutions to protect their crops against weeds, diseases and pests, must be avoided at all costs, as these would inevitably lead to declining biodiversity. The fact is that there will be no available, effective, safe and affordable alternatives to chemical PPPs in the short-term and uncertainties remain in the medium-term.

The gap between the rapid loss of active substances and the availability and costs of new tools to ensure satisfactory crop protection must be addressed. It should be recognized that the reduction of chemical PPPs does not always and automatically allow to reach the objective of reduction of PPPs if alternative effective and sustainable tools do not exist. It should be kept in mind that arbitrary and not well-assessed targets have in most cases been inappropriate and led to opposite effects: when losing certain tools, in the absence of viable alternatives providing satisfactory control of harmful organisms, growers were forced, in the short to medium term, to use higher quantities of other PPPs (possibly with lower hazard weightings than the PPP they seek to replace).

Furthermore, due consideration should be given to the fact that a significant reduction in PPP use has already been achieved in specific sectors in past years (e.g. 50% reduction of insecticide and fungicide use in sugar beet growing since the 1990s, notably thanks to highly effective low-dose seed treatments).

Finally, if digital and precision agriculture and equipment represent a positive development and are well considered among farmers, one should bear in mind that it requires very significant investment which currently is preventing its large-scale adoption and deployment. It is therefore crucial to urgently support innovation in precision agriculture (on-board sensors, robotics, etc.) but also to support financially the acquisition and use of such equipment.

NGTs, a crucial tool for further reduction of the use of PPPs

The agricultural sector has proven that the use of innovative techniques is the path to progress. One especially innovative tool complementing the agricultural toolbox in the pursuit of sustainably using pesticides are New Genomic Techniques (NGTs), often also referred as New Breeding Techniques (NBTs). **NGTs are an efficient and necessary tool to accompany a new agricultural evolution.** Many crop varieties on the market are the product of mutation technologies. Genome-editing can be used to make exactly the same changes as these older, unregulated mutagenesis technologies but with less time and cost.

The Platform supports the objectives laid out in the EU's Biodiversity 2030 and Farm to Fork strategies, but targets to reduce the use of PPPs are putting increasing pressure on farmers. NGTs can help ease that pressure, contributing to refilling the farmers' shrinking toolbox. Genome editing technologies allow to make just a few changes to the existing DNA at very specific sequences and the end product may be indistinguishable from one made using older, unregulated technologies like for example chemical mutagenesis. In the light of the very short deadline of the Farm to Fork and revised SUR targets, the Platform calls for accelerating the current procedure on NGTs by the Commission. At least, the Commission should provide now, in the revised SUR, a positive signal and legal security to the development of NBTs which would help provide tolerant varieties, contributing to a reduction in the use chemical pesticides.

Current developments are still insufficient to compensate the reduction in the use of PPPs

For European farmers, the next decade will bring increasing difficulties and pressures resulting from for example climate change, whilst having to deal with an ever-shrinking crop protection toolbox as more and more PPP active substances will be removed. Statistically, about one new PPP active substance will come onstream while four disappear, drastically reducing farmers' access to efficient and innovative tools².

Alternative integrated crop protection measures, involving complex combinations of solutions, will evolve comparatively slowly and appear unlikely to match the pace of the shrinking toolbox. In order to deal with this, the **European farming community needs to be prepared and should be aware of how quickly affordable and effective alternative integrated crop protection measures are expected to be developed.** In the meantime, farmers need to understand what the content of their current toolbox will look like for the next five years and if they can access quickly affordable and effective crop protection tools such as herbicides, insecticides and fungicides.

Considerable work has been done already trying to develop and evaluate alternative approaches, but so far results have been limited. Comparison of biocontrol solutions aimed at controlling or modifying the behaviour of pests (and indirectly limiting the spread of viruses to plants) has not yet yielded any promising results. Breeding for resistance or tolerance takes time and progresses slowly (one sugar beet variety so far, tolerant against one out of the four different viruses of the Virus Yellows complex is currently available but with lower performance/yield, hence leading to the question of whether this is indeed an effective alternative). Alternative integrated measures of weed control, such as mechanical weeding are being developed and tested, but they remain costly and hardly affordable, whilst research and development is comparatively slow. **Our platform therefore calls for the swift development of available, effective, safe and affordable alternatives to chemical PPPs prior to cutting existing viable and necessary tools. Criteria defining the effectiveness and affordability of alternatives should be clearly established.**

² The European Union benefits from one of the most stringent systems in the world for authorising and controlling the use of pesticides, if not the strictest. Of the 1 466 active substances currently (March 2022) recorded in the EU pesticides database, by far the biggest proportion 934 (around 63.7%) are not approved, 449 (around 30.6%) are approved, 66 (around 4.5%) are pending and 17 (around 1.2%) around have not yet been assessed at EU level.

EU farming and primary food processing need to remain competitive whilst reflecting high sustainability standards: introduction of mirror clauses is a must.

EU crop production and primary food processing complies with the highest sustainability standards in the world. These standards will rise still further with the implementation of the EU's Green Deal ambitions and the revision of the SUD. Reciprocity in standards of production is crucial first and foremost from a health and environmental point of view. An active substance banned in the EU because of its risk for health or environment remains dangerous outside the EU, whatever the climatic conditions. It is key that the revision of the SUD address this point and suggest clear provisions to avoid pushing these risks outside the EU. In addition, reciprocity in standards of production will avoid a strong deterioration of EU competitiveness and leakage of agricultural production from the EU to third countries with lower standards.

Our platform calls on the European Commission to champion the standards of EU sectors as well as the valorisation of their achievements towards sustainability. While this objective is already pursued via the Maximum Residue Limit (MRL) tool, this legislation is currently insufficient to address health and environmental issues in full. Other, additional measures such as so-called mirror measures to respect **reciprocity in terms of environmental sustainability and in terms of health issues during the production/cultivation process** should be considered to remedy this and be integrated either horizontally or via the various legislative frameworks the EU develops, including the upcoming proposed SUR.

It is crucial to take into account the various points raised above in view of the revision of the Sustainable Use of Pesticides legislation. It is - from an operational point of view - the only sustainable way forward as it allows to reconcile environmental & health objectives with the ability of farmers to continue producing high quality and safe crops while guaranteeing them a viable standard of living.

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