

# INSPIRATION NOTE

## TO MOVE FORWARD IN THE EU'S COMMON AGRICULTURAL POLICY:

HOW  
MEMBER  
STATES SHOULD  
USE THE NEW  
STRATEGIC PLANS TO  
SERIOUSLY REDUCE  
DEPENDENCY ON  
PESTICIDES

MAY 2019



**Pesticide  
Action  
Network**  
Europe

REVISION 1

Agronomic practices

Monitoring

Physical control

Biological control

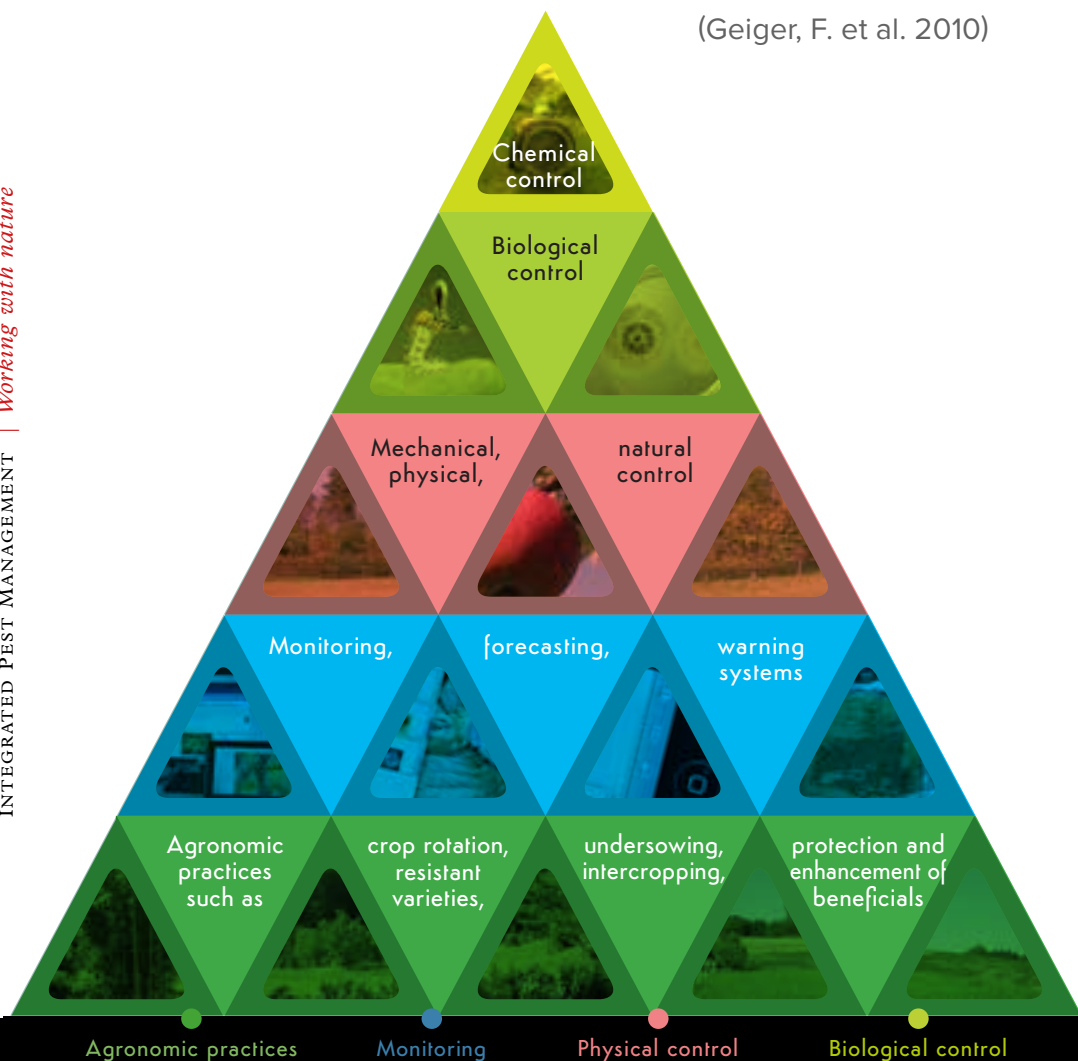


# LOW IMPACT FARMING

“If biodiversity is to be restored in Europe and opportunities are to be created for crop production utilizing biodiversity-based ecosystem services such as biological pest control, there must be a Europe-wide shift towards farming with minimum use of pesticides over large areas”

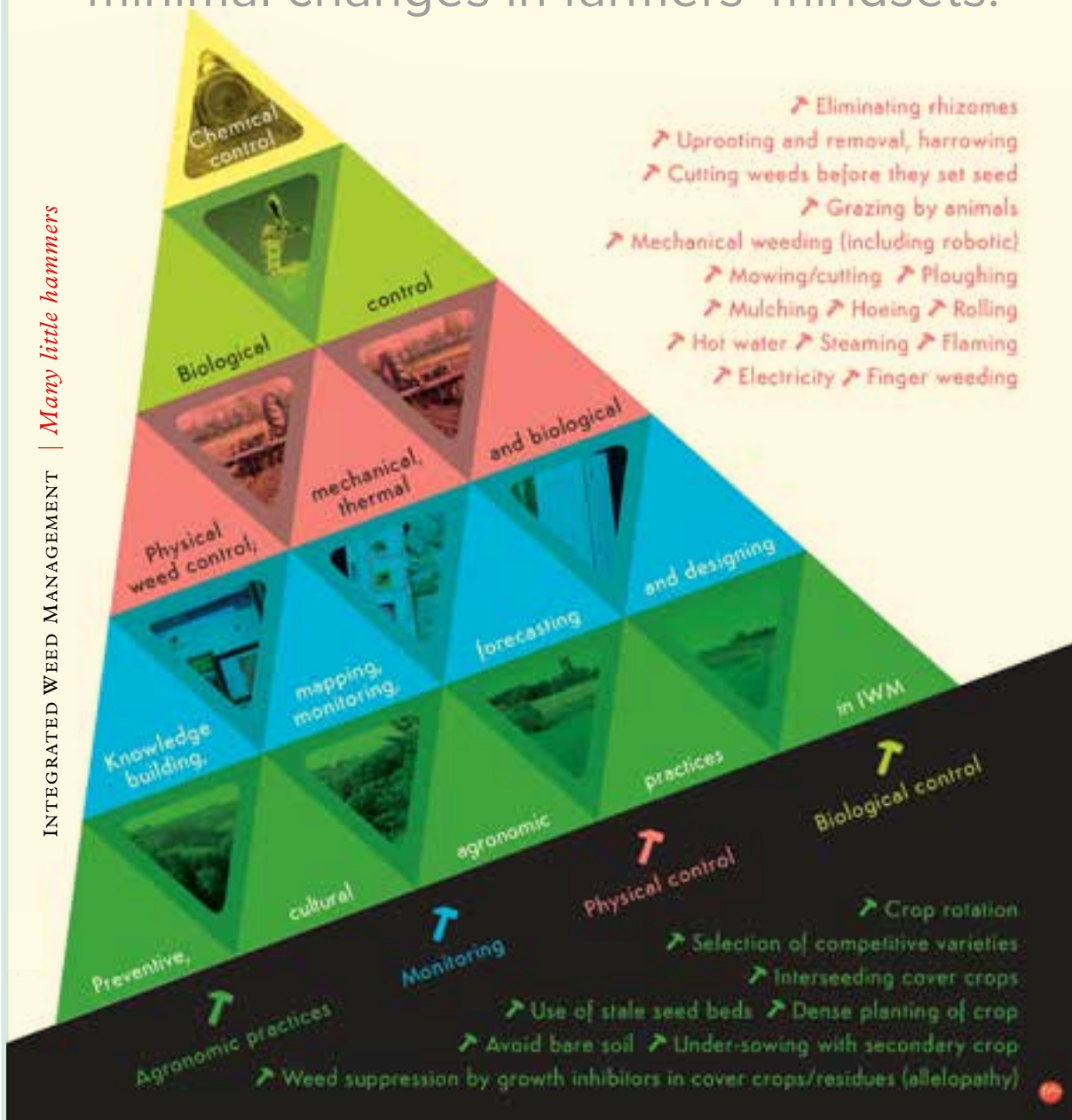
(Geiger, F. et al. 2010)

INTEGRATED PEST MANAGEMENT | *Working with nature*



This reflection paper aims to show how Member States could use the current proposal for a reformed Common Agricultural Policy (CAP) to develop a results-based approach that encourages the much-needed ecological transition with the lowest possible increases in administrative burden for Member States, and with minimal changes in farmers' mindsets.

INTEGRATED WEED MANAGEMENT | Many little hammers



**P**esticide Action Network Europe (PAN Europe) calls on Member States to build on the legislative proposals (published by the European Commission in June 2018<sup>1 2</sup>), by developing Strategic Plans that contain serious quantitative targets and timetables for reducing pesticide use and uptake of agro-ecological techniques and organic agriculture, combined with solid indicators on pesticide dependency to measure the reductions.

Building on the EU legislation on pesticides in force and on the so-called new Green Architecture of the CAP<sup>3</sup>, Member States should be able to include in their CAP strategic plans systems that encourage replacement of chemical inputs with agro-ecological techniques (practices and products). Redesigning farming systems based on ecological principles and re-establishing connections between producers and consumers would support a socio-ecological transformation of the food system. The way forward for Member States is to enforce and update the conditionality criteria, taking advantage of the added flexibility in the different measures, to build up a system supporting farmers financially and technically to change. At the same time, they would develop indicators measuring reductions in pesticide dependency, including quantifying how farmers protect nature (including pollinators, water and soil as well as agronomic practices).

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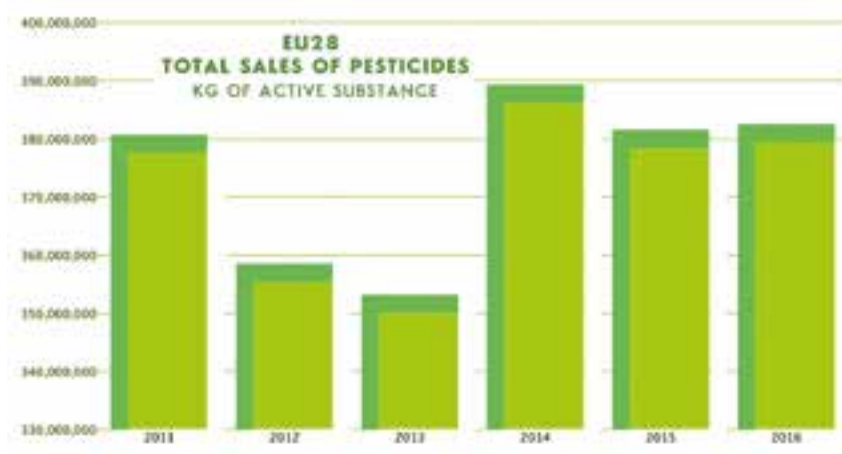
1 [https://ec.europa.eu/info/food-farming-fisheries/key-policies/common-agricultural-policy/future-cap\\_en](https://ec.europa.eu/info/food-farming-fisheries/key-policies/common-agricultural-policy/future-cap_en)

2 PAN Europe already submitted a [paper](#) explaining why the current CAP is not delivering. Also, PAN Europe submitted a [position](#) on what the New Delivery Model should look like.

3 [https://ec.europa.eu/info/events/round-tables-green-architecture-cap-2018-nov-12\\_en](https://ec.europa.eu/info/events/round-tables-green-architecture-cap-2018-nov-12_en)

# 1 Why there is a need to set pesticide use reductions as an overall CAP strategic target

Each year around 400 000 tonnes of active substances are sold in the EU, with evident impacts on our environment.



The European farming model is no longer sustainable, due to among others:

- The collapse of insects<sup>4 5</sup> and of entire ecosystems and taxa (bees and other pollinators, birds, etc.) within and in proximity to agricultural areas;
- The presence of mixtures of pesticide residues in soils and water are the rule rather than the exception<sup>6 7</sup>;
- The rise of chronic diseases such as the ones highly likely caused by endocrine disrupting chemicals/pesticides<sup>8</sup>;

4 Caspar A. Hallmann, Martin Sorg, Eelke Jongejans, Henk Siepel, Nick Hofland, Heinz Schwan, Werner Stenmans, Andreas Muller, Hubert Sumser, Thomas Horren, Dave Goulson, Hans de Kroon, More than 75 percent decline over 27 years in total flying insect biomass in protected areas, PLOS ONE | <https://doi.org/10.1371/journal.pone.0185809> October 18, 2017

5 Francisco Sánchez-Bayo, Kris A.G. Wyckhuys, Worldwide decline of the entomofauna: A review of its drivers, Biological Conservation 232 (2019) 8–27.

6 Silva, Vera, Mol, H, Zomer, Paul, Tienstra, Marc, Ritsema, Coen, Geissen, Violette Pesticide residues in European agricultural soils – A hidden reality unfolded, Science of The Total Environment, 10.1016/j.scitotenv.2018.10.441,

7 Stehle and Schulz, 2015. Pesticide authorisation in the EU – environment unprotected? Environ Sci Pollut Res 22:19632-47

8 [www.who.int/ceh/publications/endocrine/en/](http://www.who.int/ceh/publications/endocrine/en/)

As clearly illustrated in the European Citizens' Initiative "Ban glyphosate and protect people and the environment from toxic pesticides", EU citizens do not want pesticides in their food and in their environment. European citizens are concerned about the loss of biodiversity and support stronger EU action to protect nature<sup>9</sup>.

An increasing number of studies show that the farmers over-use pesticides<sup>10 11</sup>, and that this is happening because farmers use pesticides with the main objective of increasing yields, not to optimise overall farm profitability<sup>12 13</sup>. This makes absolutely no sense, either for the farmers or for society at large. Time for a change!

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## 2 Member States should target pesticide use reductions in their CAP strategic plans

Of course, PAN Europe hopes that the ongoing negotiations in the Council and the European Parliament will update the EU legal baseline. However, we wish to include in the criteria of the CAP strategic plans obligations on Member States to significantly reduce the use of pesticides, setting clear timetables and developing new measures to encourage this transition.

Ten years ago, Member States agreed on a number of obligations relating to pesticides in Directive 2009/128/EC on the Sustainable Use of Pesticides (SUPD). This Directive made it mandatory for Member States to 1) protect aquatic environments and drinking water, via the mandatory establishment of buffer zones and 2) to protect the sensitive population and the environment by minimising or prohibiting pesticides in specific areas. In addition, the SUPD made it mandatory for all farmers to apply Integrated Pest Management (IPM) as from 2014, and made it mandatory for Member States to support the uptake of IPM in farming.

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<sup>9</sup> [http://europa.eu/rapid/press-release\\_IP-19-2360\\_en.htm](http://europa.eu/rapid/press-release_IP-19-2360_en.htm)

<sup>10</sup> Florence Jacquet, Jean-Pierre Butault, Laurence Guichard, 2011, An economic analysis of the possibility of reducing pesticides in French field crops, *Ecological Economics* 70, 1638–1648

<sup>11</sup> Martin Lechenet, Fabrice Dessaint, Guillaume Py, David Makowski & Nicolas Munier-Jolain, 2017: Reducing pesticide use while preserving crop productivity and profitability on arable farms, *Nature Plants* volume 3, Article number: 17008

<sup>12</sup> Skevas, T., Stefanou, S.E., Oude Lansink, A.G.J.M, 2014: Pesticide use, environmental spillovers and efficiency: A nonparametric risk-adjusted efficiency approach applied to Dutch arable farming, *European Journal of Operational Research* 237. p. 658 - 664.

<sup>13</sup> Pedersen, A.B., Nielsen, H.Ø., Christensen, T., Hasler, B., 2012. Optimising the effect of policy instruments: a study of farmers' decision rationales and how they match the incentives in Danish pesticide policy. *J. Environ. Plan. Manag.* 55, 1094–1110.

## A reminder: The general principle of Integrated Pest Management (Annex III of the SUPD):

- 1 The prevention and/or suppression of harmful organisms should be achieved or supported among other options especially by:
  - crop rotation,
  - use of adequate cultivation techniques (e.g. stale seedbed technique, sowing dates and densities, under-sowing, conservation tillage, pruning and direct sowing),
  - use, where appropriate, of resistant/tolerant cultivars and standard/certified seed and planting material,
  - use of balanced fertilisation, liming and irrigation/drainage practices,
  - preventing the spreading of harmful organisms by hygiene measures (e.g. by regular cleansing of machinery and equipment),
  - protection and enhancement of important beneficial organisms, e.g. by adequate plant protection measures or the utilisation of ecological infrastructures inside and outside production sites.
- 2 Harmful organisms must be monitored by adequate methods and tools, where available. Such adequate tools should include observations in the field as well as scientifically sound warning, forecasting and early diagnosis systems, where feasible, as well as the use of advice from professionally qualified advisors.
- 3 Based on the results of the monitoring the professional user has to decide whether and when to apply plant protection measures. Robust and scientifically sound threshold values are essential components for decision making. For harmful organisms threshold levels defined for the region, specific areas, crops and particular climatic conditions must be taken into account before treatments, where feasible.
- 4 Sustainable biological, physical and other non-chemical methods must be preferred to chemical methods if they provide satisfactory pest control.
- 5 The pesticides applied shall be as specific as possible for the target and shall have the least side effects on human health, non-target organisms and the environment.
- 6 The professional user should keep the use of pesticides and other forms of intervention to levels that are necessary, e.g. by reduced doses, reduced application frequency or partial applications, considering that the level of risk in vegetation is acceptable and they do not increase the risk for development of resistance in populations of harmful organisms.
- 7 Where the risk of resistance against a plant protection measure is known and where the level of harmful organisms requires repeated application of pesticides to the crops, available anti-resistance strategies should be applied to maintain the effectiveness of the products. This may include the use of multiple pesticides with different modes of action.
- 8 Based on the records on the use of pesticides and on the monitoring of harmful organisms the professional user should check the success of the applied plant protection measures.

**A reminder:** the framework that Member States should have established in 2013 to support farmers in the move towards IPM (Article 14 of the SUPD)

Member States shall take all necessary measures to promote low pesticide-input pest management, giving wherever possible priority to non-chemical methods, **so that professional users of pesticides switch to practices and products with the lowest risk to human health and the environment among those available for the same pest problem.** Low pesticide-input pest management includes integrated pest management as well as organic farming according to Council Regulation (EC) No 834/2007 of 28 June 2007 on organic production and labelling of organic products.

Member States **shall establish** or support the establishment of necessary conditions for the implementation of integrated pest management. In particular, they **shall ensure** that professional users have at their disposal **information and tools** for pest monitoring and decision making, as well as **advisory services** on integrated pest management.

Member States **shall establish** appropriate **incentives to encourage professional users to implement crop or sector-specific guidelines** for integrated pest management on a voluntary basis. Public authorities and/or organisations representing particular professional users may draw up such guidelines. Member States shall refer to those guidelines that they consider relevant and appropriate in their National Action Plans.

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### 3 How to upgrade conditionality criteria and introduce new and ambitious measures to ensure serious pesticide use reductions in the new CAP

Recital (35) of the EU Regulation No. 1107/2009:

“The Council should include in the statutory management requirement referred to in Annex III to Council Regulation (EC) No 1782/2003 of 29 September 2003 establishing common rules for direct support schemes under the common agricultural policy and establishing certain support schemes for farmers (1), the principles of integrated pest management, including good plant protection practice and non-chemical methods of plant protection and pest and crop management”.



The 2013 reform of the Common Agricultural Policy (CAP) adopted, among others, an addendum on 25th June 2013 making the link between the CAP and the SUPD<sup>14</sup>. This was recalled in the European Commission's report 'Member State National Action Plans and on progress in the implementation of Directive 2009/128/EC on the sustainable use of pesticides (COM(2017) 587 final):

Once this Directive has been implemented in all Member States and the obligations directly applicable to farmers have been identified, the Commission will be addressing the Joint Statement by the European Parliament and the Council in Regulation (EU) No 1306/2013 which invites the Commission to include the relevant parts of the Directive in the system of cross-compliance. Moreover, in the meantime, the Commission will support the Member States in the development of methodologies to assess compliance with the eight IPM principles, taking into account the diversity of EU agriculture and the principle of subsidiarity.

The European Parliament's own initiative report (2017/2284(INI)) approved in February 2019, stated:

[The EP] Stresses that the CAP in its current form does not sufficiently encourage and incentivise the reduction of farms' dependency on pesticides and the uptake of organic production techniques; considers that specific policy instruments in the post-2020 CAP are required in order to help change farmers' behaviour as regards pesticide use.

[The EP] Deplores the fact that the Commission proposal on the new post-2020 CAP does not incorporate the principle of IPM in the statutory management requirements referred to in Annex III of that proposal; [The EP] stresses that lack of linkage between the directive and the new CAP model will effectively hamper the reduction of pesticide dependency.

[The EP] Calls on the Commission and the Member States to ensure better coherence of the Directive and its implementation with related EU legislation and policies, most notably the provisions of the CAP and Regulation (EC) No 1107/2009, and in particular to integrate the IPM principles as legal requirements under the CAP, pursuant to Article 14 of the directive.

### 3.1 Reinforced conditionality

Member States should use their right to reinforce conditionality rules to reduce pesticide dependency and integrate the SUPD, by adding the following criteria (in bold italics to the July 2018 legislative proposal below):

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**14 The addendum specifies:** "The Council and the European Parliament invite the Commission to monitor the transposition and the implementation by the Member States of Directive 2000/60/EC of 23 October 2000 establishing a framework for Community action in the field of water policy and Directive 2009/128/EC of the European Parliament and of the Council of 21 October 2009 establishing a framework for Community action to achieve the sustainable use of pesticides and, where appropriate, to come forward, once these Directives have been implemented in all Member States and the obligations directly applicable to farmers have been identified, with a legislative proposal amending this regulation with a view to including the relevant parts of these Directives in the system of cross-compliance."

## Statutory Mandatory Requirements (SMR)

|                                      |   |
|--------------------------------------|---|
| <p>SMR 12<br/>(currently SMR 10)</p> | <p>Regulation (EC) No 1107/2009 of the European Parliament and of the Council of 21 October 2009 concerning the placing of plant protection products on the market:</p> <ul style="list-style-type: none"> <li>• the whole of Article 55, first and second sentence:</li> <li>• <b>Article 67</b></li> </ul>  |
| <p>SMR 13<br/>(new)</p>              | <p>Directive 2009/128/EC of the European Parliament and of the Council of 21 October 2009 establishing a framework for Community action to achieve the sustainable use of pesticides (OJ L 309, 24.11.2009, p. 71):</p> <ul style="list-style-type: none"> <li>• Article 5(2),</li> <li>• Article 8(1 to 5)</li> <li>• Article 12 with regard to restrictions on the use of pesticides in protected areas defined on the basis of the Water Framework Directive and Natura 2000 legislation.</li> <li>• Article 13(1) and (3) on handling and storage of pesticides and disposal of remnants.</li> <li>• <b>Article 14</b></li> </ul> |

## Good Agronomic and Environmental Conditions (GAEC)

|               |   |  |
|---------------|---|--|
| <p>GAEC 4</p> | <p>Establishment of buffer strips along water courses <b>with no pesticide or fertiliser use</b></p>  | <p>Protection of river <b>courses and aquatic species/ecosystems</b> against pollution, <b>toxicity</b> and run-off</p>  |
| <p>GAEC 5</p> | <p>Use of Farm Sustainability Tool for <b>input management</b></p>  | <p>Allowing the farmer to start planning and encouraging the system change over time</p>   |
| <p>GAEC 7</p> | <p>No bare soil <b>in sensitive periods</b></p>   | <p>Protection <b>and nourishment</b> of the soil, <b>avoiding weed proliferation in winter</b></p>   |
| <p>GAEC 8</p> | <p><b>At least four years'</b> Crop rotation <b>with leguminous crops on all arable land</b></p>  | <p>Preserve the soil potential<br/><b>Break pest reproductive cycles. Decrease susceptibility to pest attack. Increase nitrogen fixing. Provide animal fodder.</b></p> |
| <p>GAEC 9</p> | <p>Minimum <b>5%</b> of agricultural area devoted to non-productive features or areas <b>where agrochemicals are not to be used</b></p> <p>Retention of landscape features</p> <p>Ban on cutting hedges and trees during the bird breeding and rearing season</p> <p>As an option, measures for avoiding invasive plant species</p> | <p>Maintenance of non-productive features and area to improve on-farm biodiversity, <b>especially boosting functional biodiversity and beneficial species.</b></p>     |

Each farmer need to prepare an input reduction plan with clear reduction targets and timetables, and that s/he registers pesticide use, and keeps records that are compiled by national statistical office annually.

## Making biodiversity work for farmers

GAEC 9: Ecological Focus Areas (EFA) have been in place as a “greening” measure since the 2013 reform (30% of direct payments were conditional upon the appropriate 3 greening measures being carried out). EFAs are intended to boost biodiversity and are needed in the fight against local extinctions and ecological collapse. If established and maintained without pesticides, they can also actually increase productivity in the whole farm area, despite being accused of “taking land out of production” (limiting crop area), by boosting pollinators, predators of pests and other agro-ecological synergies: yields increase by +11% in wheat, +26% in peas and +32% in carrots<sup>15</sup> for example. For this reason PAN EU and other NGOs insist on pesticide-free EFAs so they can function agroecologically.

### Examples of how a few Member States within the current CAP (GAEC 1) have made direct payments conditions on farmers’ establishment of not sprayed buffer strips

| Member State/Region | GAEC on buffer strips to protect water regarding pesticides                                |
|---------------------|--|
| Belgium, Flanders   | 1 meter wide strip measured inland from the uppermost edge of the bank of watercourses     |
| Czech Republic      | 3 meters strip from the bank line for the protection of aquatic organisms                  |
| Spain               | 5 meters wide strip, although greater restrictions may be indicated on the product label   |
| UK, Scotland        | 2 meters wide strip of the top of the bank of surface water, with spot application allowed |
| UK, Wales           | 2 meters wide strip of the top of the bank of surface water                                |

Source: European Commission, DG AGRI, 2018

<sup>15</sup> Reference: Wäckers & van Rijn, 2012; table 2, pg 13. DG AGRI EIP-AGRI Focus Group: Benefits of landscape features for arable crop production, 2016 [https://ec.europa.eu/eip/agriculture/sites/agri-eip/files/eip-agri\\_fg\\_ecological-focus-areas\\_final-report\\_en.pdf](https://ec.europa.eu/eip/agriculture/sites/agri-eip/files/eip-agri_fg_ecological-focus-areas_final-report_en.pdf); Grab et al 2018; Blaauw and Isaacs 2014. [www.low-impact-farming.info/cap-eu-policies](http://www.low-impact-farming.info/cap-eu-policies)

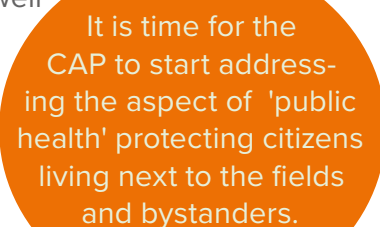
## 3.2 Eco-Schemes (building on the reinforced conditionality)

Eco-schemes are a new intervention available in the CAP reform proposals, mandatory for Member States to offer but voluntary for farmers to take up. They follow the same principle as rural development measures, except that eco-schemes are annual payments, fully financed by the EU budget (i.e. no co-financing by Member States). The amount of funds set aside for eco-schemes needs to be large enough to make them attractive for farmers to take up.

For example, Member States when asking farmers to prepare input reduction plans need to take into account that often it can take more than a year to replace chemical inputs with natural processes; therefore there needs to a package of ecoschemes to accompany this transition, for instance:

- Applying organic production methods, including longer crop rotations with leguminous crops (beyond reinforced GAEC 8), use of mixed cropping, cover crops to avoid bare soil and weed growth (GAEC 7)<sup>16</sup>
- Introduction of higher share of agricultural areas devoted to non-crop features to boost habitat for functional biodiversity and beneficial species, including the establishment of hedges (beyond reinforced GAEC 4)
- Introduction of **non-farmed** buffer strips to protect water (beyond reinforced GAEC 9) against chemical inputs as well as dedicating spaces for nature and bystanders

Also, all too often, the current measures to encourage pesticide use reductions offered by Member States within rural development are seen by farmers as overly bureaucratic or focused on one method only, therefore lacking the dynamism to support farmers effectively. Recent research shows that Danish farmers are the most willing to engage in environmental projects if these are annual commitments<sup>17</sup>. It would also be worth introducing biological control products, mechanical weeding, the use of compost, the use of traditional varieties, and the establishment of annual buffer strips among the eco-schemes.



It is time for the CAP to start addressing the aspect of 'public health' protecting citizens living next to the fields and bystanders.

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<sup>16</sup> Soil ecosystems, especially the soil biota that create humus in the topsoil and bind it together, are fed by exudates of carbohydrate and proteins from plant roots. Without these inputs from cover vegetation, topsoil quality decreases, and soil is eroded physically. But cover crops can be beneficial plant species that nourish the soil, while also preventing unwanted weeds becoming established.

<sup>17</sup> Petersen et al, 2011. Optimising the effect of policy instruments: A study on farmers' decision rationals and how they match incentives in Danish pesticide policy. *Journal of Environmental Planning and Management*, 55(8), 1094-1110

**A few examples of rural development measures that could become annual:**

| Country/Region    | CAP – instrument           | What  | Amount €/ha  |
|-------------------|----------------------------|---|--|
| France            | Agro-environmental measure | biological control agents; introduction of beneficiaries; or use of sexual confusion on the agricultural fields, in tunnels or in the field | Arable crops: 64 €/ha;<br>Vegetables: 105 €/ha,<br>Fruit trees: 70 €/ha;<br>Grapes: 79€/ha |
| Luxembourg        | Agro-environmental measure | biological control agents to fight <i>Cochylis</i> and <i>Eudemias</i> on grapes.   | 120 or 200 €/ha depending on the exact intervention needed                                 |
| Belgium, Flanders | Agro-environmental measure | sexual confusing against the codling moth in fruit production   | 250 €/ha   |
| Belgium           |                            | mechanical weeding  | 250 €/ha   |

Source: European Commission, DG AGRI, 2010

### 3.3 Rural Development Programme. The fruit and vegetable scheme

The CAP reform proposal intends to give Member States more freedom in the support measures they can offer to farmers. PAN Europe encourages Member States to consider developing holistic approaches to encourage the much-needed ecological transition, moving towards a chemical-free agricultural sector, proposing solutions protecting both the environment and – as a novelty – public health.

Doing so will mean seriously updating the IPM schemes mentioned below, starting to integrate concepts like redesigning and rewilding the farming system in an approach to start working with nature (rather than against it) along permaculture and agroecological lines. Farmers can be encouraged in a stepwise approach to think about advanced agronomic practices to strengthen soil health, maintaining/creating landscape features to attract predators of crop pests, pollinators, etc.

This could mean farmers also beginning to grow more diverse crops (more genetically diverse or traditional crops, more leguminous crops) which could be less known in the market, and there must also be room in the support schemes to allow farmers to explore new collaborations while developing new market segments, where possible selling these locally.

**Examples of how in the past a few Member States promoted integrated production as a holistic farming approach towards better agronomic practices – but which will need a serious update in the future:**

| Country/Region    | CAP – instrument                 | What  | Amount €/ha  |
|-------------------|----------------------------------|---|--|
| IT/Emilia Romagna | F&V CMO                          | selected pesticides combined with an integrated production system (incl. crop rotation, fertilisation plan, soil protection measures) | € 100/ha (arable)<br>€ 300/ha (vegetables),<br>€ 550/ha (fruit)  |
| Austria           | Agro-envir. in Rural Development | crop rotations (annual crops), restrictions on fertiliser and pesticide use, training and record-keeping                              | € 150/ha (potato/turnip),<br>€ 250/ha (strawberries),<br>€ 300/ha (fruit/hops),<br>up to € 400/ha (vine) |
| France            | AE                               | elaboration of a strategic plan on alternative solutions; explaining crop rotation or/and thermic weeding                             | € 196/ha (arable crops),<br>€ 298/ha vegetables,<br>€ 332/ha fruit trees<br>€ 341/ha grapes              |

Source: European Commission, DG AGRI, 2010

## 4 How the Farm Advisory Service must accompany the farmers technically in the transition

To encourage the transition it is important to create independent Farm Advisory System (FAS). This is also mentioned in the European Commission’s report ‘Member State National Action Plans and on progress in the implementation of Directive 2009/128/EC on the sustainable use of pesticides (COM(2017) 587 final):

Member States are required to include the IPM general principles in their farm advisory system under Article 12 (2) (e) of Regulation (EU) No 1306/2013. Member States highlighted that official advisory services, which are independent of commercial interest, are very important for IPM implementation’.

Also, it is crucial that Member States make the FAS visible allowing this body to become a real technical support in encouraging farmers to seriously reduce their dependency on pesticides.

Furthermore, it is important to make the FAS dynamic to continuously look for methods and instruments to replace chemical substances with non-chemical alternatives in the attempt to increasingly reduce dependency on chemical inputs. The French government agency INRA's research work 'towards chemical free agriculture'<sup>18</sup> can be inspirational for Member States. Also, useful ideas are provided by some of the knowledge being built and shared in the European Innovation Partnership, such as the notions on non-chemical weed management in arable cropping systems<sup>19</sup>.

## Some inspiration on how to encourage farmers to start working more with nature:

- Lewis et al. (1997) *A total system approach to sustainable pest management*, Proc. Natl. Acad. Sci. USA, Vol. 94.
- Lenteren et al. (2017) *Biological control using invertebrates and microorganisms: plenty of new opportunities*, Journal of the International Organization for Biological Control
- Le Fevbres et al. (2015) *Mandatory integrated pest management in the European Union: experimental insights on consumers' reactions*, Review of Agricultural, Food and Environmental Studies
- Erisman et al (2017) *Agriculture and Biodiversity, a better balance benefits both*, [www.aimspress.com/journal/agriculture](http://www.aimspress.com/journal/agriculture)
- Geiger, F. et al (2010) *Persistent negative effects of pesticides on biodiversity and biological control potential on European farmland*, Basis and Applied Ecology (2010), doi: 10.1016/j.baae.2009.12.001
- IOBC working group on functional biodiversity, [see here](#)
- IOBC working group on integrated production guidelines, [see here](#)
- IOBC, IBMA and PAN Europe's films, IPM working with nature, [see here](#)
- How French arable farmers work with nature [here](#) as part of the French EcoPhyto
- How Luxembourg wine growers obtain CAP funding to reduce dependency on pesticides, [see here](#)

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<sup>18</sup> <https://inra-dam-front-resources-cdn.wedia-group.com/ressources/afile/442690-5075f-resource-priorites-scientifiques-horizon-europe-food-2030-pesticide.pdf>

<sup>19</sup> <https://ec.europa.eu/eip/agriculture/en/non-chemical-weed-management-arable-cropping>

Finally, it is crucial that the FAS takes a proactive role in assisting the transition. The time might also be ripe to expand farmer-to-farmer exchanges, in order to actively involve local NGOs (this is the most effective way of spreading ideas in farming and is possible within the EIP but needs to be applied on a much larger scale). They also need to consider offering technical support to groups outside farming, for instance local communities going pesticide-free.

## Example of an FAS model encouraging transition

In 2011-2013 the Danish organic movement conducted an EU-financed pilot project assisting conventional farmers to consider converting to organic. Agreements were made with 12 Danish towns mainly as part of a campaign to protect their drinking water from contamination with pesticides (see [toxic free towns](#)) - altogether offering around 3000 farmers a conversion check and assistance from the Danish organic movement in the conversion.

The project is still ongoing. Now 30 towns are engaging with them, each year around 200 conventional farmers take up the offer, with the majority of them deciding to convert. Today around 9% of all Danish Agricultural Utilised Areas are cultivated organically.

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## 5 Indicators to measure the pesticide use reductions

Pesticide use was introduced as an agri-environmental indicator back in the 2006 Commission Communication (COM(2006) 508) but has never been operational (no pesticide indicators exist in the current CAP common monitoring and evaluation indicators). Regulation (EC) No 1185/2009 concerning statistics on pesticides has allowed the European Commission to publish annual sale statistics since 2011. Instead, despite the regulation foresees that use statistics are meant to be published every five years with the first time being in 2016, this data collection is still not operational<sup>20</sup>.

Lacking statistics makes it impossible for anybody (EU, Member States, farmers, citizens) to evaluate to what extent the European model of farming is delivering in relation to the environment and public health. This is neither an advantage for farmers, who often claim to want to be seen as the solution to the current environmental and climate crises, nor for the general public and NGOs such as PAN Europe, who want to understand better.

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<sup>20</sup> <https://ec.europa.eu/eurostat/web/agriculture/agri-environmental-indicators/information>



Some of the audit reports on the SUPD highlight that farming practices have actually worsened in recent years:

- Danish fact finding report: controlling grass-weeds is becoming an increasing problem due to higher concentration on winter crops (with higher revenue) rather than having better rotation with more spring crops, which could facilitate more cultural control. The Competent Authorities are aware of this issue, but to date they have not introduced any specific initiative to promote better rotations.
- Swedish fact finding report: the lack of alternatives to cereal crops, or poorer financial returns from these alternative crops (for example, the only large-scale buyer of peas closed), leading to an over-reliance on cereals, and a sub-optimal rotation on some farms.

Without solid data on pesticide use linked to crops it is impossible to find out if this is one of the reasons why pesticide use has increased! An easy solution to this knowledge gap can be provided by including the reporting as part of the conditionality criteria being applied to farmers (a number of Member States, like Finland and Ireland, already collect use data from farmers).

In the CAP reform proposals, the Commission introduces an impact indicator on pesticide risk and impact (I.27). We encourage Member States to update the proposed I.27 to become a real indicator measuring actual pesticide dependency reductions at least in a number of key crops. Also, we encourage member states to develop specific indicators to measure the development of pollinators, water and soil as well as agronomic practices.

Each Member State needs to develop indicators measuring reductions in pesticide dependency, including quantifying how farmers protect nature (pollinators, water and soil) and the agronomic practices they apply.

## A reminder: pesticide statistics that Member States need to develop (SUPD article 15)

Member States shall:

- (a) calculate harmonised risk indicators (..) by using statistical data collected in accordance with the Community legislation concerning statistics on plant protection products together with other relevant data;
- (b) identify trends in the use of certain active substances;
- (c) identify priority items, such as active substances, crops, regions or practices, that require particular attention or good practices that can be used as examples in order to achieve the objectives of this Directive to reduce the risks and impacts of pesticide use on human health and the environment and to encourage the development and introduction of integrated pest management and of alternative approaches or techniques in order to reduce dependency on the use of pesticides.

Member States shall communicate the results of the evaluations carried out pursuant to paragraph 2 to the Commission and to other Member States and shall make this information available to the public.

Finally, PAN Europe calls on Member States to introduce pesticide taxations (and make a footnote if possible or again a direct link to our homepage: [www.pan-europe.info/issues/pesticide-taxation](http://www.pan-europe.info/issues/pesticide-taxation). in relation to the budget, we strongly urge the Member States not to cut but to safeguard the Pillar II budget needed for transitioning to sustainable agriculture in the next Multiannual Financial Framework. In addition, we strongly urge Member States to transfer money from Pillar I to Pillar II and avoid any moves in the opposite direction, which would further weaken rural development, an increasingly squeezed but essential part of the CAP.

## 6 Conclusions

Public awareness on climate change, species extinction and biodiversity loss is currently very high as citizens see with increasing clarity what is happening in the World around them. Yet there is no question that society has for decades demanded an end to biodiversity loss, solutions to climate change and a transition to pesticide free agriculture. The solutions are often a win-win-win for farmers, biodiversity and society, as working with nature not against it to ensure long-term productivity brings multiple benefits including system resilience and reduced inputs. The role of public money given out via EU policies like the CAP should be to support farmers in this transition, as changing farming practices to become more sustainable implies some financial risk in the short term. Member States need to make it as easy as possible for farmers to respond to these demands and to support them technically and financially, and to ensure that their CAP strategic plans emphasise and sufficiently fund these much-needed measures.

*The sole responsibility of this publication lies with the author. The European Union is not responsible for any use that may be made of the information contained therein.*



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**Pesticide  
Action  
Network**  
Europe

Pesticide Action Network Europe (PAN Europe) was founded in 1987 and brings together consumer, public health, environmental organisations, and women's groups from across Europe. PAN Europe is part of the global network PAN International working to minimise the negative effects and replace the use of harmful pesticides with ecologically sound alternatives.