Updated Dutch National Action Plan on the sustainable use of plant protection products 2022-2025

Inhoud

1 Introduction

This National Action Plan sets us how the Netherlands implements the Sustainable Use Directive (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), hereinafter the 'SUD'.[1] The National Action Plan describes the policy intentions and actions that have been defined to meet the requirements under the SUD in the order in which they appear in the Articles of the SUD.

The Dutch policy for plant protection in agriculture for the period from 2020 through to 2030 is largely laid down in the Implementation Programme for the Vision for the Future of Plant Protection 2030[2] (hereinafter the 'Implementation Programme'). The Implementation Programme sets objectives, including interim objectives, and actions to achieve the three strategic objectives from the Vision for the Future of Plant Protection 2030, focused on making plants and cultivation systems resilient. Where still relevant, objectives, interim objectives, timetables and actions from the second policy memorandum on sustainable plant protection entitled 'Healthy Growth, Sustainable Harvest' (*Gezonde Groei, Duurzame Oogst*) have been incorporated in the Implementation Programme, such as objectives and interim objectives for water quality (linked to the Water Framework Directive and/or the Drinking Water Directive[3]).

In January 2022, a new government took office, which has defined policy intentions in the area of plant protection. These policy intentions are aimed at encouraging integrated pest management, bringing the standards for the use of plant protection products in line with the Water Framework Directive, and conducting health research among farmers and local residents. Where policy intentions have already been further specified, such as in the letter to the House of Representatives of The Netherlands on the outlook for farmers,[4] those are described below in section 2 (Objectives and indicators), section 9 (Protection of aquatic environment) and section 14 (Integrated pest management).

This National Action Plan supplements the aforementioned policy, as the latter does not cover all aspects set out in the Sustainable Use Directive, such as professional competence, inspections of plant protection product application equipment, professional use outside of agriculture, and private use. In addition, it should be noted that a number of aspects in the Implementation Programme and the coalition agreement are relevant to this National Action Plan in terms of the actions to be taken to meet the requirements set out in the Articles of the SUD. This particularly concerns actions aimed at making plants and cultivation systems resilient, integrated pest management, innovative application techniques and reducing emissions into the environment, in particular in order to protect water quality. Where relevant, this National Action Plan refers to the Implementation Programme. Each year, an annual plan is drawn up that describes which actions from the Implementation Programme are to be started and completed, which is based on the resources available at the time.

1 SUD: Sustainable Use Directive
2 Implementation Programme for the Vision for the Future of Plant Protection 2030 | Parliamentary Paper | Rijksoverheid.nl
3 Water Framework Directive - Directive 2000/60/EC; Drinking Water Directive - Directive 98/83/EC
4 Letter to House of Representatives on outlook for farmers| Parliamentary Paper | Rijksoverheid.nl

Anticipating policy developments

Pursuant to the SUD, a National Action Plan must be reviewed at least every five years. For the present National Action Plan, it has been decided to adopt it for a shorter term of four years. The detailing of the policy intentions from the coalition agreement may lead to adjustments to this National Action Plan. Scheduled actions under the Implementation Programme aimed at developing indicators, and motions adopted in the House of Representatives, may also lead to adjustments to this National Action Plan. Furthermore, in mid-2022 the European Commission will submit a proposal to amend the SUD, which will likely lead to the introduction of new mandatory frameworks for National Action Plans. Lastly, it is expected that in 2022 agreement will be reached on a new EU regulation aimed at the integration of statistics on agricultural input and output (SAIO Regulation), which will have consequences for the collection of statistical data on the sales and use of plant protection products (statistics on pesticides).

Given the requirements under the SUD and the Dutch Plant Protection Products and Biocides Act (*Wet gewasbeschermingsmiddelen en biociden*), updating the National Action Plan could not be postponed until the aforementioned policy developments had resulted in the adoption of new regulations. Therefore, it was decided to adopt a National Action Plan with a term of four years. It is expected that the details of the aforementioned developments will have been finalised before the next National Action Plan for the period 2026-2030 is to be adopted. That said, the European Commission will be informed in the interim if the aforementioned developments should require adjustments to the present National Action Plan at an earlier time.

Context for authorisation and use

In the European Union, the SUD and the National Action Plans of Member States are part of other policies on plant protection products . A distinction needs to be made between the authorisation policy for plant protection products and the policy for sustainable use of authorised products.
The authorisation policy is set out in Regulation (EC) No 1107/2009 concerning the placing of plant protection products on the market, which lays down rules for the approval of active substances in the EU and for the authorisation of plant protection products in Member States. Only products for which it has been determined that it is possible to use them safely, so without having any harmful effect on human or animal health or any unacceptable effects on the environment, provided that good agricultural practices are applied, may be placed on the market.
Plant protection products placed on the market under this Regulation are subject to the SUD, which 'establishes a framework to achieve a sustainable use of pesticides by reducing the risks and impacts of pesticide use on human health and the environment and promoting the use of integrated pest management and of alternative approaches or techniques such as non-chemical alternatives to pesticides.' (SUD, Article 1). The SUD applies without prejudice to any additional requirements that may be adopted at the national level in order to achieve objectives set under other national or EU regulations, such as the Water Framework Directive.

EU context for statistics and controls

Regulation (EC) No 1185/2009 concerning statistics on pesticides provides Member States with 'a common framework for the systematic production of Community statistics on the placing on the market and use of those pesticides which are plant protection products', and as such also affects harmonised indicators that are based on those data. Regulation *(EU) No 2017/625 on official controls* provides a framework for enforcement and inspection by Member States, as well as a framework for the performance of controls, including audits, in Member States by the European Commission.

Public consultation

A draft of the National Action Plan was made available for public consultation for a period of six weeks. Twelve responses were submitted. Three of those were by organisations who also responded on behalf of other organisations. In total, thirty organisations directly or indirectly responded to the draft (see Appendix 3, which gives a summary of their comments).
Comments and views that supplemented, corrected or improved the text of the draft National Plan in line with the purpose and scope of SUD, and which fitted in with the existing policy frameworks and the available funding, were incorporated.

Comments and views that were contrary to the existing policy framework, and which would have led to a weakening of the intentions and actions to map and reduce risks and effects, were not incorporated. Comments and views that related to the authorisation policy were not incorporated, as this policy is outside the scope of the SUD and this National Action Plan.

Most of the comments submitted related to intentions and actions also referred to in actions mentioned in the coalition agreement and included in new policy developments as described above. These included setting quantitative objectives for the reduction of the use of plant protection products, objectives and rules for integrated pest management, the registration of plant protection products and plant protection measures, the protection of surface water, drinking water and groundwater, and the protection of sensitive areas and local residents. If the comments fitted in with policy intentions that have already been further detailed, they were incorporated in the final text of this National Action Plan. Comments relating to matters not yet detailed in the relevant policy or for which no additional funding is available were not incorporated in this National Action Plan, but these comments will be considered in detailing the policy intentions set out in the current government's coalition agreement.

Other policy processes

In addition to the sectoral policy for plant protection, there are various other policy initiatives that help to reduce the risks and effects of plant protection products. For example, in designing a National Strategic Plan for the new Common Agricultural Policy, measures have been included that require maintaining wider buffer zones between crops and water courses, which will reduce emissions. In addition, measures are being encouraged that contribute to the use of resilient cultivation systems and precision techniques that help to reduce the need for and risks of plant protection products.[5]

The process through which the provisions of Articles 4 through to 15 of the SUD will be implemented under the current policy framework in the coming years is outlined below.

5 Home | Future of CAP

2 Objectives and indicators – Article 4

Article 4 of the SUD describes what must be included in a National Action Plan. A National Action Plan must, for example, set out quantitative objectives, targets, measures and timetables to reduce risks and impacts of the use of plant protection products 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 those products. A National Action Plan must also include indicators to monitor the use of products containing active substances of particular concern, such as substances which are candidates for substitution under Regulation (EC) No 1107/2009. Lastly, a National Action Plan must describe how the provisions of the other Articles of the SUD are implemented. All this is detailed in the following sections on the implementation of the provisions of Articles 5 through to 15 of the SUD.

Objectives and measure to reduce risks and effect and encourage integrated pest management

Agricultural use

The Implementation Programme details the actions to be taken to achieve the following three strategic objectives from the Vision for the Future of Plant Protection 2030:

1. plant and cultivation systems are resilient;
2. agriculture and horticulture are connected with nature;
3. virtually no emissions into the environment and virtually no residues on products.

Actions that contribute to the achievement of these three strategic objectives ensure that the need for plant protection products and thus the effects of plant protection products on human health and the environment are reduced. The purpose of these actions is to strengthen the further development and application of principles of integrated pest management aimed at preventive and non-chemical measures, monitoring diseases, pests and weeds, and applying plant protection products as specifically as possible (precision agriculture). To achieve this strengthening of integrated pest management, the current government has in the coalition agreement committed itself to the formulation of specific interim objectives.

In the Implementation Programme, the objectives have been further detailed in interim objectives with a timetable for:

- developing toolkit and knowledge for farmers;
- initiating a downward trend in the environmental impact of plant protection products; and
- reducing exceedances of water quality standards, emissions into the environment and residues on products.

For the purposes of reducing exceedances of water quality standards, quantitative objectives have been formulated in order to achieve the objectives under the Water Framework Directive for surface water, drinking water and groundwater by 2027, with the ultimate objective being to have virtually no emissions of plant protection products from outdoor cultivation into the environment.

A summary of the objectives can be found in Appendix 1. For a more detailed description of the strategic objectives, interim objectives and timetables, please refer to section 3.5 of the Implementation Programme (pp. 22-24). In addition, the government intends to further specify the interim objectives for resilient cultivation and for the connection of agriculture with nature. This will be combined with the aforementioned intention to define interim objectives for integrated pest management.

The actions to implement the objectives set in the Implementation Programme are described in sections 4.1 (monitoring and integrated approach), 4.2 (prevention), 4.3 (application of technical and biological measures), 4.4 (effective disease, pest and weed control with plant protection products with as little side effects as possible), 4.5 (emission reduction measures) 4.6 (residue reduction measures), 5.2 (connection with building blocks of resilient cultivation systems) and 5.3 (factors that affect the achievement of a transition to resilient plants and cultivation systems) of the Implementation Programme. As described in the introduction, it is annually reviewed whether actions from the Implementation Programme have been completed or are still in progress, and whether new actions can be started.
As part of the Implementation Programme, a monitoring system is being developed. To this end, the progress made on the Implementation Programme (interim objectives and actions) is annually monitored on the basis of a number of indicators, so that the Implementation Programme can be updated or adjusted where necessary. This will involve using existing indicators for water quality and harmonised risk indicators for sales of plant protection products. For other components, indicators are still to be selected and detailed. If this leads to the identification of indicators that are relevant to the National Action Plan, then the National Action plan will be adjusted in the interim, or those indicators will be included in new updated National Action Plan.

Professional use outside of agriculture and private use

Professional use outside of agriculture:
The current policy is based on the principle of no professional use of plant protection products outside of agriculture. Due to a court decision in 2020, a statutory ban on such use of plant protection products is now non-binding. The aim is to restore this ban in 2022. The application of an integrated approach in those areas will make the use of plant protection products unnecessary. A (temporary) exemption can be granted only if the use of plant protection products is unavoidable, as no technologically feasible alternatives are available or such alternatives are not financially viable. Since 2017, it is assessed every two years whether an exemption can be discontinued, or whether an additional exemption is necessary (for example, due to the emergence of new health risks or harmful organisms as a result of climate change). Research has found that the quality of the surface water used for the preparation of drinking water (in terms of glyphosate concentrations and exceedances of the relevant standard) has demonstrably improved since the introduction of the (former) ban and that his improvement is probably related to the ban. Directorate-General for Public Works and Water Management (*Rijkswaterstaat*), the government body tasked with the management of the national infrastructure, discontinued the use of plant protection products as of 1 January 2022. Pilot projects are being conducted in the period up to 2025 to phase out the use of plant protection products on railway embankments.

Private use:
When it comes to private (non-professional) use, the use of mechanical pest control methods instead of plant protection products is likewise preferred. If plant protection products are used, then low-risk products should be considered in the first place. To achieve this objective, steps are being taken to influence the behaviour or private users. To this end, the principles for integrated pest management formulated for professional users can be applied. A ban is less suited for this purpose due to various reasons, including the risk that private users will switch to unauthorised products, such as chlorine, for which the risks have not been assessed and the use of which is harmful to humans, animals and the environment. Sales of glyphosate-based plant protection products fell by over 70% in the period 2017-2020. This reduction is partly the result of a joint effort by the sector (producers and gardening sector) to discourage the sale of glyphosate-based plant protection products and to develop new less environmentally harmful products.

Indicators for substances of particular concern

Substances that exceed water quality standards

The Netherlands has an extensive network of ditches, drainage and navigable canals, including circular canals surrounding polders, as well as streams and rivers, adjoined by agricultural land. Consequently, the presence of plant protection product residues in surface water is an indicator for the spread of these substances in the environment as a whole. An extensive monitoring network is in place to measure the presence of plant protection product residues in surface water. The monitoring data are recorded and published on a public website named 'Pesticides Atlas' (*Bestrijdingsmiddelenatlas*): www.bestrijdingsmiddelenatlas.nl.[6]
The monitoring network is used to assess whether the water quality standards under the Water Framework Directive and the Drinking Water Directive are being met. The monitoring provides information about widespread and frequent exceedances of standards for substances of particular concern.

→ Emission reduction plans
It has been agreed with the sector organisation of producers of plant protection products (formerly named Nefyto, now CropLifeNL) that where exceedances of ecological water quality standards are probably related to the use of particular active substances in plant protection products, the producers will draw up emission reduction plans for those active substances. So far, 18 emission reduction plans have been drawn up. An analysis is being performed for two new substances. The monitoring shows that for many substances for which emission reduction plans have been drawn up the number of exceedances of standards has decreased. Emission Reduction Plan – Emission Reduction Toolbox (toolboxwater.nl)

→ Maximum dose per hectare per year
For four active substances,[7] it is probable that an exceedance of the maximum residue levels resulting from authorised use of plant protection products is caused by cumulative use, i.e. the use of different plant protection products containing the same active substance on the same plot, as a result of which too much of that substance ends up in the environment. For plant protection products containing at least one of those four active substances, the Board for the Authorisation of Plant Protection Products and Biocides (*College voor de toelating van gewasbeschermingsmiddelen en biociden*, Ctgb) has revised the instructions for use such that cumulative use is now prohibited once the maximum dose has been reached.

The protection of the aquatic environment and drinking water will be discussed in more detail below in section 9 (on Article 11).

Substances (azoles) that may lead to resistance of Aspergillus fumigatus to antifungal drugs used in human medicine.

Aspergillus fumigatus is a species of fungus that is widespread in the environment. While the fungus poses no danger to healthy individuals, patients with a weakened immune system who are infected with it are at serious risk. Patients are treated with azole-based medicines. Azoles have a broad range of applications; they are not only used in antifungal medicines, but also, among other things, in biocides and plant protection products (i.e. fungicides). *Aspergillus fumigatus* is increasingly resistant to azole-based medicines. This complicates the treatment of patients infected with this fungus.
This azole resistance has been found in waste from flower bulbs that had been treated with azole-based fungicides. The Board for the Authorisation of Plant Protection Products and Biocides has revised the instructions for the use of azole-based plant protection products in flower bulb cultivation. The aim of these measures is to avoid further development of azole resistance in flower bulb waste leads.
The effectiveness of these measures is being monitored. Recent research has found that plant waste heaps from a number of other crops can also be hotspots for the development of azole-resistant *Aspergillus fumigates*.

6 For a number of plant protection products, no suitable analysis techniques are available. The National Environmental Indicator (*Nationale Milieu Indicator*) provides information about environmental risks posed by those substances.
7 abamectin, esfenvalerate, chlorantraniliprole, and deltamethrin.

Substances which are candidates for substitution under Regulation (EC) No 1107/2009.

The multi-annual 'Knowledge Impulse – Green Plant Protection' (*Kennisimpuls Groene Gewasbescherming*) research programme explores cultivation systems and application techniques that reduce the use and risk of plant protection products and offer farmers additional feasible courses of action. One of the research questions in the programme is whether it is possible to grow crops without using plant protection products containing active substances that are candidates for substitution. The trend in the use of these substances is monitored by means of the EU's harmonised risk indicator for plant protection products (HRI 1, see section 12 below), as well as the indicator applied by the European Commission as part of the 'Farm to Fork' (F2F) strategy for sustainable food, which aims to reduce the use and risks of those products. Further information on the research programme is available at:
https://www.groenegewasbescherming-bestuivers.nl/nl/ggb/Groene-gewasbescherming-2.htm
https://research.wur.nl/en/projects/kennisimpuls-groene-gewasbescherming-bo-43-01106-008

3 Training – Article 5

Since 1996, everyone in the Netherlands who stores, uses, sells, or is in possession of plant protection products in a professional capacity must have a certificate of professional competence ('licence'). There are different types of such licences, which take into account the difficulty level of the tasks and responsibilities of the person that is to use a particular product in a professional capacity. In 2019, the scope of the training system was extended to include advisers on the professional application of plant protection products, including advisers who don't sell products (certificate of professional competence for advisers).
Only non-professional use is exempt from the obligation to have a certificate of professional competence.

The Accreditations Office (*Bureau Erkenningen*) in Ede has been designated as the competent authority for the implementation of the regulations. A certificate of professional competence is valid for a period of five years and is renewed by the Accreditations Office if the holder demonstrates sufficient knowledge by successfully completing refresher courses or again passing the exam. The training subjects referred to in the SUD are implemented in national regulations, as well as through the conditions referred to in the SUD for the recognition of training courses and certificates of professional competence of other Member States (i.e. equivalent qualifications, certificate not older than five years, command of the Dutch language).

Website of Accreditations Office: www.erkenningen.nl, with information brochures in Dutch, English and German.

4 Requirements for sales of plant protection products – Article 6

Distributors must have sufficient staff available at the time of sale to provide adequate information to customers about the use of plant protection products and the risks the use of plant protection products pose to human health and the environment. All such staff must have a certificate of professional competence. Any plant protection products authorised for professional use may only be sold to persons with the applicable certificate of professional competence.
Distributors[8] must provide information about:

- the correct use of the relevant plant protection product;
- the risks the use of this plant protection product poses to human health and the environment; and
- the applicable safety instructions for this plant protection product.

Distributors selling only products for non-professional use are exempt from this obligation to provide information on these three aspects. In such cases, the producer of the plant protection product has the responsibility to provide the relevant information to the users. Producers must provide the information on the product packaging and must also state this information on their website or in other media. Retailers must ensure that the information is provided to the customer at the time of sale of the plant protection product. The information must be easy understand and explain the risks the use of the plant protection product poses to the health of human and animals and/or to the environment. This must in any case cover exposure to the plant protection product and its safe storage and safe handling and the safe disposal of remnants in accordance with the applicable regulations. In addition, information must be provided about alternative pest control methods that pose less risk.

8 A number of producers and distributors of plant protection products have joined forces in the Agro Cloud Services Foundation (AgroCloser) to facilitate tracking and tracing of plant protection products. AgroCloser - Home

5 Information and awareness-raising – Article 7

All plant protection products are toxic to a greater or lesser degree. Most plant protection products qualify as 'dangerous substances' under environmental law. Therefore, it is important that both professionals and the general public are informed about the risks of handling these substances.

This dissemination of information and awareness-raising is ensured by means of the training requirements that apply to professional users, distributors and advisers (see Article 5). In addition, the Implementation Programme sets out various actions aimed at improving working conditions and reducing risks for those who apply plant protection products and those who may be exposed to plant protection products by entering areas recently treated with plant protection products (see below in section 4.4.5 on working conditions).

The general public is informed about the usefulness, necessity and risks of plant protection products through awareness campaigns, news items in the media and public information on websites. This is being done by government-funded organisations and often also by special interest organisations, civil society organisations and the news media.
Institutions with relevant expertise, such as the National Poisons Information Centre (*Nationaal Vergiftigingen Informatie Centrum*, NVIC), the Netherlands Nutrition Centre (*Voedingscentrum*) and Wageningen University & Research (WUR), play an important role as independent scientific sources. On Rijksoverheid.nl, the website of the Dutch government, farmers, professionals working outside of agriculture and the general public can find information about plant protection policy and the safe use of plant protection products, as well as answers to frequently asked questions. The websites of the Board for the Authorisation of Plant Protection Products and Biocides (Ctgb) and the Netherlands Food and Consumer Product Safety Authority (*Nederlandse Voedsel- en Warenautoriteit*, NVWA) also include information for the general public.

In addition, awareness campaigns focus on reducing the avoidable use of plant protection products by the general public. The public information organisation Environment Central (*Milieu Centraal*) runs various government-funded campaigns to raise environmental awareness among the general public about whether to use plant protection products and if so, which plant protection products can be used. In addition, the government-funded website www.onkruidVergaat.nl ('weeds die') provides information about non-chemical weed control for professionals outside of the agriculture sector and the general public.

Websites:
www.rivm.nl(NVIC),
www.voedingscentrum.nl (in Dutch and English)
Bestrijdingsmiddelen | Rijksoverheid.nl
Vraag en antwoord | Bestrijdingsmiddelen | Rijksoverheid.nl
Bestrijdingsmiddelen: gif of gewasbeschermingsmiddelen? - WUR
Geïntegreerde bestrijding van ziekten en plagen - WUR
www.ctgb.nl (Dutch and English)
Gewasbescherming | NVWA
Bestrijdingsmiddelen en het milieu | Milieu Centraal
https://www.onkruidvergaat.nl/

6 Inspection of spraying equipment – Article 8

Since 1997, inspections are mandatory for spraying equipment. Prior to 2011, this only applied to field sprayers and orchard sprayers. The purpose of these inspections is to ensure that 'the use of equipment is optimal, reliable and safe for users and their environment'.
Since 2011, inspections have become mandatory for additional categories of spraying equipment under regulations implemented to comply with the SUD. In addition, over the term of the present updated National Action Plan, regulations will be developed and implemented that will make inspections mandatory for equipment used to treat seed with plant protection products. Simple equipment such as knapsack sprayers and handheld sprayers are exempt from the inspection requirement.

The inspections of equipment for the application of plant protection products are performed by an independent organisation, the Foundation for Quality Control of Agricultural Equipment (*Stichting Kwaliteitseisen Landbouwtechniek*, SKL) in Wageningen, and monitored by the Netherlands Food and Consumer Product Safety Authority (NVWA). Inspections must be performed every three years, and no later than three years after the purchase date for new equipment. An inspection interval of six years applies for a number of types of spraying equipment and other equipment for the application of plant protection products that pose limited risks. These types of equipment are defined in the legislation. In principle, inspection certificates issued by foreign inspection bodies are recognised by the Netherlands.

Website of Foundation for Quality Control of Agricultural Equipment: www.sklkeuring.nl, in Dutch and English.

7 Aerial spraying – Article 9

Aerial spraying (i.e. spraying from an aircraft) is prohibited.
The Minister of Agriculture, Nature and Food Quality may grant an exemption for aerial spraying in the event of an emergency, provided this is necessitated by exceptional circumstances. This is in accordance with the provisions of the SUD.
At present, many new applications of drones are being developed. Drones are considered 'aircraft' as referred to in the SUD and the application of plant protection products by means of drones is currently prohibited under the aerial spraying ban. If necessary in light of new developments (i.e. technological developments and developments in cultivation systems and the scientific knowledge underlying risk assessments), the current general ban will be reconsidered and might be amended in conformity with the provisions of the SUD.
The use of drones for purposes other than the application of plant protection products, such as to spread macro organisms for biological pest control, or to monitor and detect pests and diseases, is not subject to the aerial spraying ban. Such use is subject to the general rules for the use of drones and is beyond the scope of this National Action Plan.

8 Information to the public – Article 10

While section 5 (Article 7) mainly concerns the obligation to provide information to professionals and the general public about handling plant protection products, Article 10 concerns the obligation to provide information to persons exposed to spray drift as a result of the application of plant protection products. The risks to local residents and passers-by are assessed in the risk assessment for the authorisation of plant protection products, which in particular considers risks to vulnerable population groups, such as children.

It is in the first place the responsibility of producers, suppliers and users of plant protection products to encourage communications between businesses and local residents. To this end, the relevant special interest organisations (Nefyto, Agrodis, Cumula, and the Dutch Federation of Agricultural and Horticultural Organisations (*Land- en Tuinbouworganisatie Nederland*, hereinafter 'LTO Nederland' have put information for the public on their websites. It advises farmers to consider local residents when applying plant protection products and helps residents to gain insight into the application of plant protection products in their local area. The purpose of these actions is to increase mutual understanding between farmers and local residents and passers-by.

A number of local residents have concerns about the effects of plant protection products on their health. In 2019, the National Institute for Public Health and the Environment (*Rijksinstituut voor Volksgezondheid en Milieu*, RIVM) conduced a health survey into local residents' exposure to plant protection products.[9] This 'health survey on people living in the direct vicinity to agricultural plots' (*verkenning van de gezondheid van omwonenden van landbouwpercelen*) found that local residents were exposed to plant protection products, but at levels below the maximum levels applied in the calculations for the risk assessment, and that the limit values applied in the authorisation policy were not exceeded. In response to this health survey, the government requested RIVM to follow up on this with an additional health survey.[10] This additional health survey found that people living in the direct vicinity (within 250 metres) of agricultural plots had fewer health complaints than those with little or no agriculture in the direct vicinity. However, there were a few exceptions to this pattern: living near plots with maize, plots with rotating crops (beets/cereals/potatoes) and plots with cereals appeared to correlate with a number of health risks.
In response to the findings of the health survey published by RIVM in 2019, the Health Council of the Netherlands (*Gezondheidsraad*) in 2020 issued a follow-up advisory report[11] on follow-up actions, calling for the following: 1) intensifying efforts to make plant protection more sustainable; 2) conducting additional health research; 3) Better monitoring of use and exposure; and 4) improving the approval and authorisation criteria with regard to cumulation and neurotoxicity. Aspects 1, 3 and 4 have been or will be addressed in the Implementation Programme. It should be noted that aspect 4 concerns actions aimed at influencing EU decision-making and EU regulations. Further decision-making on aspect 2 will take place after RIVM has issued an advisory report on this aspect.[12]
That said, the government has already decided to expand this health research to also include health effects of plant protection product use on farmers.

9 https://www.bestrijdingsmiddelen-omwonenden.nl/blootstellingsonderzoek
10 Health survey on people living in the direct vicinity of agricultural plots: additional analyses | RIVM
11 Vervolgadvies gewasbescherming en omwonenden | Advies | Gezondheidsraad
12 Gezondheidsraadsadvies gewasbescherming en omwonenden | Tweede Kamer der Staten-Generaal

RIVM maintains a website that provides information about local residents' exposure to plant protection products. The websites of the Board for the Authorisation of Plant Protection Products and Biocides (Ctgb) and the Netherlands Food and Consumer Product Safety Authority (NVWA) also provide information about this. Local residents can report possible improper use to the NVWA and they are requested to contact the Municipal Health Service (*Gemeentelijke Gezondheidsdienst*, GGD) if they have health complaints.

Websites
Home | Bestrijdingsmiddelen en Omwonenden (bestrijdingsmiddelen-omwonenden.nl)
Gewasbeschermingsmiddelen en gezondheid | Gewasbescherming | NVWA
Veiligheid van omwonenden | College voor de toelating van gewasbeschermingsmiddelen en biociden (ctgb.nl)
Omwonenden en gewasbescherming - LTO
CropLife NL | Voor gezonde gewassen - Omwonenden en gewasbeschermingsmiddelen
Gewasbescherming-flyer-A5-ONLINE.pdf (lto.nl)

9 Protection of aquatic environment and drinking water – Article 11

In 2019, PBL Netherlands Environmental Assessment Agency published an interim assessment[13] of the second policy memorandum on sustainable plant protection for the period 2013-2023 entitled 'Healthy Growth, Sustainable Harvest', in which it observed that while the policy measures and the efforts made by the sector had led to a reduction of the number of exceedances of the standards, the interim objective for 2018 (50% reduction of exceedances of the standards) had not been achieved yet[14] (see also section 3.5 in the Implementation Programme). Consequently, additional measures were agreed to further reduce emissions and achieve the interim objectives for 2023 (95% reduction of exceedances of the standards) and 2027 (no exceedances of the standards). Initially, in 2015, measures were agreed for covered cultivation under the General Agreement on Water Treatment in Greenhouse Horticulture (*Hoofdlijnenakkoord waterzuivering in de Glastuinbouw*). This included the obligation to put in place a water treatment facility that reduces the emission of residual water / wastewater by at least 95%. In 2019, as part of the Vision for the Future of Plant Protection 2030, measures were also agreed for open-field cultivation under the Package of Measures to Reduce Emissions from Open-Field Cultivation (*Pakket van maatregelen emissiereductie gewasbescherming open teelten*),[15] to reduce emissions of plant protection products from open-field cultivation into the environment to virtually zero by 1 January 2030. For the specific actions agreed, please refer to this Package of Measures (which, for example, sets out the methodology to be applied for determine the best available techniques to reduce drift by at least 95%), and to section 4.5 (emission reduction measures) in the Implementation Programme.[16]

On the initiative of LTO Nederland, the Delta Plan for Agricultural Water Management (*Deltaplan Agrarisch Waterbeheer*, DAW) has been developed.[17] In the DAW programme, farmers and government authorities together tackle the water-related challenges faced by the Netherlands, which includes reducing emissions of plant protection products to surface water and groundwater. The DAW programme plays a role in the implementation of the actions under the aforementioned Package of Measures. In its letter to the House of Representatives on the outlook for farmers,[18] the government announced that this programme will be strengthened.
The policy intention under the coalition agreement to better align the use of plant protection products to the standards under the Water Framework Directive will be further implemented over the term of the present National Action Plan.

13 Geïntegreerde Gewasbescherming nader beschouwd. | PBL Netherlands Environmental Assessment Agency
14 Gewasbeschermingsmiddelen en de realisatie ecologische kwaliteit van oppervlaktewater 2018 | PBL Planbureau voor de Leefomgeving
15 Letter to House of Representatives on Vision for the Future of Plant Protection 2030 and Package of Measures to reduce emissions of plant protection products from open-field cultivation| Parliamentary Paper | Rijksoverheid.nl
16 Implementation Programme for the Vision for the Future of Plant Protection 2030 | Parliamentary Paper | Rijksoverheid.nl
17 Announcement | Delta Plan for Agricultural Water Management
18

10 Reduction of use or risks in specific areas – Article 12

Generally speaking, certain measures apply to multiple Articles in the SUD. For example, measures to protect the general public may also reduce emissions to surface water.

Areas used by the general public or by vulnerable groups

It has been found in practice that due to surface run-off, plant protection products applied to sealed surfaces end up in surface water, which can lead to a deterioration of surface water quality and exceedances of the maximum concentrations under the applicable drinking water quality standards. If plant protection products are applied to sealed surfaces in public areas, such as car parks and pavements, the risks of exposure of the general public are relatively high.
Therefore, chemical pest control on sealed surfaces outside of agriculture should be avoided, except in specifically described situations. This generally also applies to professional use outside of agriculture, including in public green spaces, in parks and on sports fields. The exceptions will be phased out over the coming years.

As mentioned above in section 8, the risks to local residents and passers-by are assessed in the risk assessment for the authorisation of plant protection products, which in particular considers risks to vulnerable population groups, such as children. In addition, to help reduce the risk of exposure, municipalities can set out rules in zoning plans still to be draw up (i.e. as part of spatial planning). In the interest of 'good spatial planning', a municipality may require that a distance (of ten to fifty metres) is kept as a buffer zone between a plot designated for agriculture and a plot designated for residential use when a new designated use is established, so as to meet substantiated interests relating to a healthy and safe living environment. The Ministry of Agriculture, Nature and Food Quality will have a study conducted in 2022 into how municipalities can be assisted with this issue.[19]

Protected areas a described in the Water Framework Directive, Birds Directive and Habitats Directive

As part of the implementation of the Water Framework Directive, river basin management plans are being implemented. The plans describe how and within which timescale the objectives for ecological quality and drinking water quality will be achieved. For the surface water bodies detailed in the relevant map, a cultivation-free zone of 5 metres must be adhered to (Section 3.81 of the Activities (Environmental Management) Decree (*Activiteitenbesluit milieubeheer*)). In addition to and in conjunction with this, management plans are applied as part of the implementation of the Birds Directive and the Habitats Directive. These management plans describe how and within which timescale the conservation objectives under these Directives will be achieved. If specific measures aimed at particular areas are necessary with respect to the sustainable use of plant protection products to achieve those quality and conservation objectives, then those measures must be included in the relevant (management) plans.

19 Letter to House of Representatives on motions and commitments in the area of plant protection | Parliamentary Paper| Rijksoverheid.nl

Additionally, general objectives and measures apply to reduce the risks for Water Framework Directive areas (see section 9 above on the protection of the aquatic environment) and an exploratory study is being conducted into the toxicity burden on sensitive areas.[20] This exploratory study is being conducted in response to the measured concentrations of plant protection product residues in nature conservation areas, which, however, did not exceed the authorisation criteria. The findings of this exploratory study will provide more clarity on whether further measures are required in those areas or in adjacent areas.

Recently treated areas

Persons applying plant protection products must informs others present on the premises, such as employees, which plots were recently treated and advise them of the waiting period for the entry of recently treated areas. Recently treated areas may in any case only be entered after the plant protection product has dried off on the crop. If a longer waiting period for the entry of recently treated areas or other measures (such as protective clothing) are considered necessary for the authorisation of a plant protection product, this is included in the statutory instructions for use. The Implementation Programme sets out actions to improve working conditions, mainly aimed at disseminating knowledge and providing information (see section 4.4.5 of the Implementation Programme).

20 Letter to House of Representatives on motions and commitments in the area of plant protection | Parliamentary Paper| Rijksoverheid.nl

11 Handling and storage of plant protection products and treatment of their packaging and remnants – Article 13

The storage of plant protection products and their remnants is subject to a number of requirements. For example, plant protection products and their remnants must be stored on a liquid-tight or liquid-resistant floor or on a liquid-tight drip tray. The floor or drip tray must be inflammable, heat-resistant and impervious to the effects of the relevant plant protection products. To prevent damage due to spills, the storage facility must have a spill containment unit with a capacity greater than the capacity of the largest packaging container. Storage of more than 400 kilograms of plant protection products is subject to the rules for the storage of packaged dangerous substances. These rules are laid down in Publication 15 of the Publication Series on Dangerous Substances (*Publicatiereeks Gevaarlijke Stoffen*, PGS).[21] Storage of less than 400 kilograms is subject to the duty of care (under Section 2a of the Plant Protection Products and Biocides Act (Wgb)). Discharging plant protection products to surface water or to the municipal sewerage system is prohibited. Therefore, no discharge facilities, such as wells, may be installed in the room where plant protection products are prepared for use. The preparation of plant protection products for use must take place above a contiguous soil protection facility (Environment (Activities) Decree, Sections 4.714, 4.716).

The Activities Decree sets out the measures for the cleaning of spraying equipment.[22] In addition to this, the aforementioned Package of Measures (see section 9 above) includes measures for the treatment of wastewater generated by the cleaning of spraying equipment. Discharging such wastewater to surface water or to the municipal sewerage system is likewise prohibited.

Since the early 1990s, businesses clean empty packaging containers in such a way that less than 0.01% of the original weight of the content stays behind in the packaging container. Depending on the nature of the plant protection product, the packaging container is then offered for waste disposal as 'industrial waste' or as 'hazardous waste'. A network of collection facilities has been set up for 'hazardous waste'. The required method of disposal is stated on the packaging.
Unopened packaging containers may be retrieved by the distributor. Opened packaging containers must be disposed of with a certified waste processor.

The sector organisations for authorisation holders and producers (Nefyto), distributors (Agrodis) and farmers (LTO Nederland) work together in the Agricultural Pesticide Remnants Foundation (*Stichting Restanten van Landbouwbestrijdingsmiddelen*, STORL). The aim of the Foundation is to promote the waste disposal of empty packaging containers and remnants of plant protection products by providing information and financial support towards the cost of disposal. The current system is being revised to ensure effective waste collection with better nationwide coverage for farmers. To this end, the AgriRecover model[23] applied in Belgium is also being considered. It is expected that the new system will be introduced as of 1 January 2023.

Website:
STORL - Home

21 Title (publicatiereeksgevaarlijkestoffen.nl)
22 Section 3.3.2 of Activities (Environmental Management) Decree
23 Agrirecover

12 Integrated pest management – Article 14

Integrated pest management (IPM) is a standard component of the training modules and professional competence requirements (see section 3, training). The interim assessment[24] by PBL Netherlands Environmental Assessment Agency of the second policy memorandum on sustainable plant protection for the period 2013-2023 ('Healthy Growth, Sustainable Harvest') was entitled 'A closer look at integrated pest management' (*Geïntegreerde Gewasbescherming nader beschouwd*). The survey conducted as part of the interim assessment found that while most of the farmers use IPM steps and measures to prevent and control diseases and pest, not all possibilities are used yet. There are major differences between different types of cultivation in terms of the extent to which farmers have switched to a system of integrated pest management. Strengthening the application of IPM is a key component of the Implementation Programme; see e.g. the actions described in sections 4.1 (monitoring and integrated approach), 4.2 (prevention), 4.3 (application of technical and biological measures), 4.4 (effective disease, pest and weed control with plant protection products with as little side effects as possible), 4.5 (emission reduction measures) and 5.2 (connection with building blocks of resilient cultivation systems) of the Implementation Programme.[25]

The government wants to further intensify the efforts made to increase the application of IPM[26] by funding and co-funding innovation, such as precision agriculture, visual detection systems, mechanical and physical pest control methods, and biological control by using natural enemies. In addition, it will be reviewed whether the staffing level at the Board for the Authorisation of Plant Protection Products and Biocides (Ctgb) can be increased to enable faster assessment of low-risk products.

Adequate recording of the IPM measures taken is a key component of IPM. The regulations stipulate that all farmers must fill in and regularly update the 'plant protection monitor' (*gewasbeschermingsmonitor*), in which they must record their use of plant protection products and how they apply and implement the principles of IPM. The Implementation Programme sets out actions with respect to digitalising and standardising the plant protection monitor and databases that may contain IPM measures. This will enable better monitoring of the use of plant protection products, ultimately on an annual basis. Connecting the plant protection monitor with databases containing IPM measures should, among other things, increase the effectiveness of the plant protection monitor, enabling farmers to better compare and utilise each other's data and experiences. If they wish, farmers can use the digitalisation and standardisation of the plant protection monitor to be transparent about the measures they have taken and their environmental impact and to obtain certification from private parties (private quality marks or supplier requirements). In addition, the information may serve as a basis for more targeted research and advice. Digitalisation and standardisation are also relevant to public enforcement. The enforcement instructions for a sound assessment of the (new) plant protection monitor will be further detailed over the term of the present updated National Action Plan. If necessary, policy rules will be adopted for this purpose.

24 Geïntegreerde Gewasbescherming nader beschouwd. | PBL Netherlands Environmental Assessment Agency
25 Implementation Programme for the Vision for the Future of Plant Protection 2030 | Parliamentary Paper | Rijksoverheid.nl
26 Letter to House of Representatives on outlook for farmers | Parliamentary Paper | Rijksoverheid.nl

In addition, work is ongoing to digitalise the labels on plant protection product packaging, in order to transition towards instructions for use for farmers that are tailored to the conditions at the time of application (E-Stewardship).

The use of precision techniques will enable farmers to better implement the principle of effective application of plant protection products (the fifth IPM principle). The Ministry of Agriculture, Nature and Food Quality supports the development and use of precision techniques by providing funding through the National Precision Agriculture Testing Ground (*Nationale Proeftuin Precisie Landbouw*, NPPL).[27]

In addition to the action item set out in the Implementation Programme to strengthen the position of advisers so that they are able to provide uniform recommendations about innovations in the area of sustainable cultivation systems, the Ministry of Agriculture, Nature and Food Quality has introduced a scheme, as part of the 'Innovation on Farms' (*Innovatie op het boerenerf*) initiative, where farmers can get a voucher for personal advice from an independent farm adviser.[28] The steps to be taken in connection with the policy intention under the coalition agreement to decouple advice on IPM from sales of plant protection products will be further detailed over the term of the present updated National Action Plan.

Article 14 of the SUD refers to both integrated pest management (IPM) and organic farming as farming practices that strive for the lowest possible input of plant protection products. This mainly concerns chemically synthesised plant protection products. At present, only a small part of the agricultural acreage in the Netherlands is farmed organically. The Dutch government endorses the European Council's conclusions on the European Commission's Action Plan for Organic Farming. In response to this Action Plan, the Ministry of Agriculture, Nature and Food Quality will draw up a National Strategy For Organic Farming in 2022.

27 NPPL homepagina - Precisielandbouw voor alle telers (proeftuinprecisielandbouw.nl)
28 Letter to House of Representatives on progress made on 'Innovation on Farms' | Parliamentary Paper | Rijksoverheid.nl

13 Indicators – Article 15

In 2019, EU harmonised risk indicators were adopted, based on Member States' data on sales of plant protection products (HRI 1), and the number of emergency authorisations granted (HRI 2). HRI 1 provides information on the sales trend for four groups of active substances: 1) low-risk active substances; 2) all approved active substances other than those in groups 1 and 3); 3) active substances approved as candidates for substitution; and 4) actives substances not approved in the EU. In addition, for the first two groups a distinction is made between chemical substances and substances on the basis of microorganisms. The risk indicators, accompanied by a review of the trend for the indicators, is published on the government's website, Rijksoverheid.nl.
Website: Harmonised Risk Indicator (HRI) in Nederland | Publicatie | Rijksoverheid.nl
It is currently being examined which additional indicators are necessary to monitor the progress made on the Implementation Programme. It is expected that those will include indicators that are relevant to the implementation of the SUD, such as trends in the environmental impact of plant protection products, the use of plant protection products of organic origin, the application of biological pest control using natural enemies and non-chemical measures, and examples of good practices. This will be reported on annually (see also above in section 1, Introduction).

Appendix 1 Strategic objectives and interim objectives (see section 3.5 of the Implementation Programme)

Strategic objectives

1. plant and cultivation systems are resilient;
2. agriculture and horticulture are connected with nature;
3. virtually no emissions and residues.

Interim objectives

Plant and cultivation systems are resilient

2021

A toolkit is available to farmers at farm level that provides insight into feasible courses of action to strengthen the resilience of plants and cultivation systems.
A toolkit is available that provides insight into the environmental impact of plant protection products within resilient cultivation systems.

2022

A baseline measurement is in place of the feasible courses of actions available to create resilience in each sector, and of the environmental impact of plant protection products within resilient cultivation systems in each sector.

2023 through to 2030

In each sector, a downward trend in evident in the environmental impact of plant protection products as a result of the (continued) development of resilient cultivation systems.

Agriculture and horticulture are connected with nature

2021

There is insight into the connection between plant-based production, plant protection and biodiversity. Indicators for this are applied as prototypes in practice.

2025

Cost-effective measures that strengthen both the resilience of the cultivation system and biodiversity are being applied in the relevant regions, sectors and types of cultivation and these measures are valued by the agricultural chain.

2030

Cost-effective measures that strengthen both the resilience of the cultivation system and biodiversity are standard practice and these measures are valued in the agricultural chain, also internationally.

Virtually no emissions

2023

- 90% reduction compared to 2013 of the number of exceedances of maximum concentrations for plant protection product residues in surface water applying under the environmental water quality standards;
- 95% reduction compared to 2013 of the number of exceedances of maximum concentrations for plant protection product residues in surface water applying under the quality standard for surface water intended for drinking water preparation.

2027

- virtually no emissions of plant protection products from farmyards and buildings when filling and surface cleaning spraying equipment and from greenhouse horticulture;
- no exceedances of maximum concentrations for plant protection product residues in surface water applying under the environmental water quality standards;
- In addition, the objectives for 2027 under the Water Framework Directive apply. The principle under the Implementation Programme is that these objectives are to be achieved.

2030

Virtually no emissions of plant protection products from open-field cultivation.

Virtually no residues

2023

Virtually no residues in agriculture and horticulture products intended for food consumption.

2027

Virtually no residues in agriculture and horticulture products intended for food consumption.

2030

Virtually no residues in agriculture and horticulture products intended for food consumption.

Appendix 2 Transposition table

The table below shows how the relevant Articles in the Sustainable Use Directive (SUD) have transposed by the Netherlands by adopting legislation and regulations implementing them.

	Article in the SUD	Section in Dutch legislation/regulations
4	National Action Plan	Plant Protection Products and Biocides Act: 81a
5	Training	Plant Protection Products and Biocides Decree: 17 and 18
6	Requirements for sales of plant protection products	
	Paragraph 1 and 2	Plant Protection Products and Biocides Act: 71 and 73
	Paragraph 3	Plant Protection Products and Biocides Decree: 25b
7	Information and awareness-raising	Does not require implementation in national legislation/regulations
8	Inspection of spraying equipment	Plant Protection Products and Biocides Decree: 32b Plant Protection Products and Biocides Regulations: 8.14
9	Aerial spraying	Plant Protection Products and Biocides Decree: 29 and 77
10	Information to the public	Does not require implementation in national legislation/ regulations
11	Protection of aquatic environment and drinking water	
	• Paragraph 1	Same Sections as for paragraph 2
	• Paragraph 2, point (a)	Plant Protection Products and Biocides Decree: 27a
	• Paragraph 2, point (b)	Activities (Environmental Management) Decree: 3.78-3.80 and 3.83 Discharge of Waste Water outside Establishments Decree (*Besluit lozen buiten inrichtingen*): 3.26
	• Paragraph 2, point (c)	Activities (Environmental Management) Decree: 3.79-3.82 Activities (Environmental Management) Decree: 3.3
	• Paragraph 2, point (d)	Plant Protection Products and Biocides Decree: 27b Discharge of Waste Water outside Establishments Decree: 3.4
12	Reduction of use or risks in specific areas	
	• Opening words and point (a)	Plant Protection Products and Biocides Decree: 27c
	• Opening words and point (b)	Water Act (*Waterwet*): 6.2 Activities (Environmental Management) Decree: 3.81 Nature Conservation Act (*Wet Natuurbescherming*): 2.3 and 2.4
	• Opening words and point (c)	Plant Protection Products and Biocides Decree: 27d

	Article in the SUD	Section in Dutch legislation/regulations
13	Handling and storage of plant protection products and treatment of their packaging and remnants	
	• Paragraph 1	Plant Protection Products and Biocides Act: 2a Plant Protection Products and Biocides Decree: 32a Activities (Environmental Management) Decree: 3.23b, 3.23d, 3.24, 3.25 and 4.104c Working Conditions Decree (*Arbeidsomstandighedenbesluit*): 3.23, 4.6, 4.7, 8.1, 8.4 and 9.5 Activities (Environmental Management) Decree: 3.93-3.95, 3.98
	• Paragraph 2	Plant Protection Products and Biocides Decree: 8 and 11
	• Paragraph 3	Activities (Environmental Management) Decree: 4.1-4.3
14	Integrated pest management	Plant Protection Products and Biocides Decree: 26
15	Indicators	Does not require implementation in national legislation/ regulations

Appendix 3 Summary of and response to opinions submitted in internet consultation on NAP

General

Consultation period: Friday, 25 November 2021 through to Friday, 7 January 2022
Number of opinions submitted: 12 (all by email)

Information about parties that submitted opinions

Order of receipt	Date of submission	Organisation
1	26/11/2021	Association of Regional Water Authorities (*Unie van Waterschappen*, UvW)
2	22/12/2021	LTO Nederland*[29]
3	24/12/2021	Agrifirm
4	14/01/2022	Province of North Brabant
5	05/01/2022	Arable Farming Sector Organisation (*BO-Akkerbouw*)
6	07/01/2022	PAN NL*[30]
7	07/01/2022	Agrodis
8	07/01/2022	Nature conservation and environmental protection (*Natuur en Milieu*, N&M) organisations*[31]
9	07/01/2022	Vewin
10	07/01/2022	Dutch Garden Sector Association (*Tuinbranche Nederland*)
11	07/01/2022	Nefyto
12	08/01/2022	To Measure is To Know (*Meten=Weten*)

* Joint opinion submitted by multiple parties.

29 Together with the Dutch Greenhouse Horticulture Association (*Glastuinbouw Neder*land), Dutch Fruit Growers' Organisation (NFO), and Royal General Bulb Growers' Association (KAVB)

30 ASEED Europe, Foodwatch Netherlands, Insects in Peril (*Insecten in Nood*), Parkinson's Association, Pesticide Action Network Netherlands, Erase all Toxins (*Stichting Tegengif*), Association for Biodynamic Agriculture and Food (*Vereniging voor Biologisch-Dynamische Landbouw en Voeding*), To Measure is To Know (*Meten=Weten*, M=W), Alternative Food (*Voedsel A*nders, WECF Netherlands

31 Foundation for Nature Conservation and Environmental Protection (*Natuur &* Milieu), Greenpeace, Society for the Preservation of Nature (*Natuurmonumenten*), SpeciesNL (*SoortenNL*), Butterfly Conservation Foundation (*Vlinderstichting*), and Birdlife Netherlands (*Vogelbescher*ming).

Comments and response

The table below summarises the comments made in the opinions submitted, listed by the submitting party that made the comment and in the order of the sections of the NAP and the Articles of the SUD.[32]
Comments and suggestions have broken down into three categories according to the following colour coding:

a. Comments and suggestions that contribute to achieving the objective of the SUD and which can result in adjustments to the NAP without any policy and budget changes being required. These comments have been incorporated;
b. Comments and suggestions that contribute to achieving the objective of the SUD, but which cannot be feasibly incorporated within the current policy framework and with the available funding. These comments have been summarised in section 1, 'Introduction', of the present updated National Action Plan, but have not been incorporated as specific action items;
c. Comments and suggestions that do not contribute to achieving the objective of the SUD, which are not within scope of the SUD, or which do not relate to the requirements for drawing up a National Action Plan. These comments have not been incorporated.

32 As the opinions submitted did not include any comments concerning Article 8 (inspection of equipment), this Article is not included in the table.

Submitting party	Introduction, General	Objectives and indicators (Article 4)	Training (Article 5)	Requirements for sales (Article 6)	Information and awareness-raising (Article 7)	Aerial spraying (Article 9)	Information to the public (Article 10)	Protection of the aquatic environment and drinking water (Article 11)	Reduction of use or risks in specific areas (Article 12)	Handling and storage (Article 13)	Integrated pest management (Article 14)	Indicators (Article 15)
1 UvW								Delete passage about the role of the Association of Regional Water Authorities (UvW) as initiator in Delta Plan for Agricultural Water Management (DAW)				
2 LTO					Would like to be given more insight into the Ministry's activities in the area of campaigns and media publicity.	When drawing up new legislation and regulations on the use of drones, give consideration to allowing a broader use of drones (e.g. for monitoring or mechanical pest control).	Role for the government in communications between farmers/ horticulturists and local residents. Help farmers and horticulturists initiate a dialogue by ensuring that the government provides clear, objective and easily accessible information.		Delete the passage about municipal zoning plans as an instrument.		Include the caveat that organic farming does not necessarily correspond to the minimisation of the use of plant protection products.	
3 Agrifirm	The government should provide (financial) support to farmers to address their business risk. Encourage technological innovation. More practical research into precision agriculture and taking this into account when assessing applications of authorisation. The range of feasible biological plant protection products is increasing.	Focus policy on achieving objectives rather than measures. That means a focus on action to reduce the environmental impact. This requires adopting a good methodology and setting a clear objective.		The sector should commit itself to an objective. Accordingly, all advisers should work towards this objective and there should therefore be no commercial interests in this respect.							When a new, digitalised plant protection monitor is introduced, this will enable more targeted encouragement and steering.	
4 Prov. of NB	Incorporate recommendations from the Resolution of the European Parliament of 12 February 2019 in the National Action Plan.	Also include objectives for groundwater under Water Framework Directive. Measurable interim objectives for impact of plant protection products on water quality for 2023. When it comes to private use, set specific objectives with measurable indicators to influence behaviour of the general public. Clear, quantitative and measurable objectives and measures to reduce the impact of pesticides on biodiversity.	Nationwide approach where independent advisory services provide advice and training.		Fully operational, transparent and public system for the collection of reliable date on the use and sales of pesticides (Resolution of EP).			Explicitly state that the objectives under the Water Framework Directive will be achieved. Measurable interim targets for water quality in relation to pesticides for 2023. State which measures are being taken to meet the obligation that the objectives for groundwater bodies under the Water Framework Directive are generally achievable.	The government should take the initiative to introduce bans in the vicinity of specific areas (instead of relying on municipal zoning plans) (Resolution of EP). Request to research health effects of plant protection products in farmers and local residents. Indicators and criteria for the assessment of pilot projects with ProRail and for the assessment of when alternatives are affordable.		Nationwide approach to advising on use of plant protection products. Reopen subsidy scheme for sustainable agriculture to farmers. Encourage measures that enable further investment and research into precision techniques and techniques for digital agriculture.	

Submitting party	Introduction, General	Objectives and indicators (Article 4)	Training (Article 5)	Requirements for sales (Article 6)	Information and awareness-raising (Article 7)	Aerial spraying (Article 9)	Information to the public (Article 10)	Protection of the aquatic environment and drinking water (Article 11)	Reduction of use or risks in specific areas (Article 12)	Handling and storage (Article 13)	Integrated pest management (Article 14)	Indicators (Article 15)
5 BO-akkerbouw	Feel that parties from within the agricultural chain are insufficiently involved in the Implementation Plan and the NAP.											
6 PAN NL	Ministry of Ministry of Health, Welfare and Sport should be involved, the NAP lacks ambition and is too general, precautionary principle. Other stakeholders should also be involved in drawing up the NAP (internet consultation was open to everyone).	NAP should include measures to implement the F2F objectives, including phasing out candidates for substitution (CfS).						Call on Ctgb to tighten up authorisation criteria, to remedy deficiencies in the authorisation procedure, and to withdraw authorisations. Introduction of organic farming in water protection areas, reassessment of provincial water protection areas.	Buffer zones of 20-50 metres wide are insufficient. Article 12 must be considered in conjunction with Article 6, paragraph 3 of the Habitats Directive. Any use of pesticides affecting Natura 2000 areas should be minimised or banned.		Encourage organic farming, annual assessment and publication of use of pesticides, make residue testing mandatory for retail.	
7 Agrodis											Integrated crop management (ICM) instead of integrated pest management (IPM).	Develop environmental indicator.
8 N&M	Other stakeholders should also be involved in drawing up the Implementation Programme. Systematic yearly monitoring of reduction. Use agricultural subsidies under the CAP to support farmers and horticulturists who aim to switch or have already switched to organic farming. (Is done in several ways, including through the eco-scheme.) Include references to related policy documents about the CAP and circular agriculture, specifically in relation to soil health, biodiversity and the business model for farmers.	Measurable interim objectives for use, emissions and residues. Quantitative reduction objectives for the use of plant protection products (see Motion of EP concerning investment and F2F objectives). In the case of indicators for substances of concern: phase out candidates for substitution (CfS).						Assessment of authorisation procedure (authorisation standards, non-assessable substances, and standards and buffer zones is required. Measures to improve water quality should be tightened up. Continuous monitoring of progress made on second policy memorandum on sustainable plant protection ('Healthy Growth, Sustainable Harvest') is required. Monitoring of progress made on Implementation Programme should be given shape and put in place.	Restrict or ban the use of pesticides in certain cases (areas designated under Water Framework Directive, Natura 2000 areas); apply the precautionary principle under Article 2, paragraph 3 of the SUD. Nationwide policy for additional buffer zones adjacent to residential areas (exposure of local residents). Effective toolkit to deploy to protect local residents and vulnerable group.		Assess the current methodology for the authorisation of low-risk substances. Encourage organic farming. Decouple sales from advisory services / coalition agreement. Maximum avoidance of use of chemical plant protection products.	

Submitting party	Introduction, General	Objectives and indicators (Article 4)	Training (Article 5)	Requirements for sales (Article 6)	Information and awareness-raising (Article 7)	Aerial spraying (Article 9)	Information to the public (Article 10)	Protection of the aquatic environment and drinking water (Article 11)	Reduction of use or risks in specific areas (Article 12)	Handling and storage (Article 13)	Integrated pest management (Article 14)	Indicators (Article 15)
9 Vewin		Register the use, emissions and environmental residues of plant protection products per plot, regionally and nationwide. Specify corrective measures to be taken when (interim) objectives are not achieved.						Assess the authorisation procedure and the buffer zone (against the standards under the Water Framework Directive).[33]	Explore the option of area-specific conditions (banning specific plant protection products, banning specific types of cultivation).		Implementation Programme is insufficiently specific with respect to IPM.	
10 Tuinbranche		Two textual proposals for passage about private use (make reference to IPM, bringing about a reduction of glyphosate use).										
11 Nefyto	Limit the NAP only to SUD/NAP requirements (Implementation Plan is broader).	Change 'accelerate IPM' to 'strengthen IPM'. Don't take steps in anticipation of the political decision-making on a ban on professional use. Two textual proposals concerning professional use outside of agriculture. Proposal for text concerning private use in relation to IPM. Proposed text on private use. State that the drop in sales of plant protection products is the result of joint action together with the sector. Delete passages on azole and CfS.		Add text on enforcement with respect to online sales.[34]			Also refer to the Ctgb.	Specify the source for the finding that the risks to the general public in public areas are relatively high.		Suggestions for text to provide clarification.	Refer to the AgroCloser (tracking and tracing) initiative and the Agro E-label app.	

33 Bring this in line with the passage in the coalition agreement.
34 In that case not only online sales, but also illegal trade in general (cf. motion in House of Representatives).

Submitting party	Introduction, General	Objectives and indicators (Article 4)	Training (Article 5)	Requirements for sales (Article 6)	Information and awareness-raising (Article 7)	Aerial spraying (Article 9)	Information to the public (Article 10)	Protection of the aquatic environment and drinking water (Article 11)	Reduction of use or risks in specific areas (Article 12)	Handling and storage (Article 13)	Integrated pest management (Article 14)	Indicators (Article 15)
12 M=W	New NAP should be based on the revised SUD.[35] How will an opportunity be provided to submit objections and appeals cf. Arhus Convention (not applicable, as Article 7 applies)	Focus more on non-chemical measures	The 'applying plant protection' (*uitvoeren gewasbescherming*) course focuses only on working safely with plant protection products, without giving any attention to alternatives or risks for local residents. To be determined, check if this is correct!		'Sellers' of plant protection products cannot give objective information about non-chemical products (see also first footnote). The government should adopt a more active role in providing information and raising awareness.			Refers to comment of PAN NL.	Restrict the use and risks in a specific area not only WITHIN the area, but also consider the activities taking place in the vicinity of the area. Introduce wider buffer zones between agricultural plots and residential areas. The application of plant protection products in the vicinity of a Natura 2000 requires prior appropriate assessment.[36] (This is within scope of nature legislation; it is not within scope of the SUD.)			

35 We must meet a statutory obligation; we cannot delay this. Next NAP will be based on the revised SUD.
36 This issue is currently being litigated.