

(Cabinet Order No 27
of 22 January 2020)

**Latvian Action Plan for the Sustainable Use of
Plant Protection Products**

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Acronyms used in the Action Plan

PPP – plant protection product
BIOR – Institute of Food Safety, Animal Health and Environment ‘BIOR’
CSB – Central Statistical Bureau
MNCP – multiannual national control programme
EFSA – European Food Safety Authority
EC – European Commission
CoE – Council of Europe
EPPO – European and Mediterranean Plant Protection Organisation
EU – European Union
IPM – integrated pest management
CMCP – coordinated multiannual control programme of the Community
LAMVPPP – Latvian Association of the Manufacturers and Vendors of Plant Protection Products
LPPRC – Latvian Plant Protection and Research Centre
LRATC – Latvian Rural Advisory and Training Centre
LEGMC – State Limited Liability Company ‘Latvian Environment, Geology and Meteorology Centre’
MRL – maximum permissible residue levels (MRLs)
CM – Cabinet of Ministers
NGOs – non-governmental organisations
FVS – Food and Veterinary Service
CDPC – Centre for Disease Prevention and Control
SUI – Safe and Sustainable Use Initiative
SPPS – State Plant Protection Service
MoA – Ministry of Agriculture

Introduction

The Latvian Action Plan for the Sustainable Use of Plant Protection Products (hereinafter – ‘the Action Plan’) has been prepared and will be used to achieve the objective as defined by Directive No 2009/128/EC of the European Parliament and of the Council of 21 October 2009 establishing a framework for Community action for ensuring a sustainable use of pesticides – to achieve a sustainable use of plant protection products, reduce the risks and impact of pesticide use on human health and the environment, and promote the development and introduction of the integrated plant protection and alternative methods in order to reduce dependence on the use of plant protection products as much as possible. Article 4 of that Directive provides for the drawing up of an action plan. On 12 April 2013, the Cabinet approved the plan for 2013–2015.

Action plans of most of EU Member States were drawn up for a five-year period ending in 2017–2018. When reviewing their action plans, Member States need to take into account the guidance for improvement and shortcomings identified in the EC Report to the European Parliament and the Council of 10 October 2017, *COM(2017) 587*, on Member State National Action Plans and on progress in the implementation of Directive 2009/128/EC on the sustainable use of pesticides.

Although Latvia drafted its new action plan in 2016, it was necessary to update it in line with the EC report. Due to this reason, the action plan was forwarded for approval in 2019. The tasks set out in the action plan and the funding required for their implementation are outlined as priorities of the State Plant Protection Service (hereinafter – ‘the SPPS’). The new Latvian Action Plan covers the 2019–2023 programming period.

Discussions on a sustainable use of pesticides in the EU began in 2002 when (*6th Environment Action Programme 2002–2012* or *6 EAP*) was adopted. The European Parliament and the Council recognised the need for further reduction of the effects pesticides, in particular plant protection products, have on human health and the environment. They stressed the need to achieve a more sustainable use of pesticides and encouraged to reduce significantly pesticide use, in general, and the risk factors associated with it, while ensuring the necessary protection of crops.

Based on this action programme, in the summer of 2006 the EC issued a number of proposals for several pieces of draft EU legislation in the area of plant protection, including a Directive to ensure the sustainable use of pesticides, which would apply to pesticides used as plant protection products. In its initial version it already set out the requirement for each Member State to draw up its own action plan towards the reduction of the risk factors associated with the use of plant protection products.

This Action Plan contains specific targets, tasks and timetables for reducing the risk factors related to the use of plant protection products. The objectives and tasks set out in the Action Plan are appropriate and suitable for the situation in Latvia. The outcomes of the individual tasks of the Action Plan objectives will be used as national indicators for assessing the achievement of the aims of the Directive.

1. Laws and regulations

Currently, there is a legal framework in place in the EU for all stages of the PPP chain. The following legislation governs the area of plant protection in the EU:

- 1) the Directive;

2) Regulation (EC) No 1107/2009/EC of the European Parliament and of the Council of 21 October 2009 concerning the placing of plant protection products on the market;

3) Directive 2009/127/EC of the European Parliament and of the Council of 21 October 2009 amending Directive 2006/42/EC with regard to machinery for pesticide application;

4) Regulation (EC) No 1185/2009 of the European Parliament and of the Council of 25 November 2009 concerning statistics on pesticides;

5) Regulation (EC) No 396/2005 of the European Parliament and of the Council of 23 February 2005 on maximum residue levels of pesticides in or on food and feed of plant and animal origin and amending Council Directive 91/414/EEC.

Until the Directive was adopted, a large portion of its requirements had already been stipulated in Latvia by national laws and regulations. However, in order to transpose the Directive fully, the existing laws and regulations were reviewed and the necessary amendments were made.

2. Objectives and tasks of the Action Plan

The national objective defined in the Action Plan that would have to be achieved by Latvia in developing and implementing an action plan for 2019–2023 is to reduce the risk and impact caused by the use of plant protection products on human health and the environment. The introduction of the integrated pest management, which is based on the development, promotion and application of alternative methods of plant protection, is an essential task for achieving of this objective. It will, in turn, reduce farmers' dependence on chemical PPPs.

This objective will be achieved by pursuing the lines of action and executing the tasks defined in the Action Plan. A brief description of the current situation shows what requirements of the Directive have already been implemented as part of the previous Action Plan. Each section of the Action Plan specifies the objectives to be achieved and the tasks to be accomplished, also indicating specific deadlines and responsible authorities. At the end of each section there are indicators that will allow evaluating the results of the tasks performed and making appropriate adjustments.

3. Areas of action, tasks and measures for the achievement of the objective

3.1. Area of action: Training of professional users, operators, distributors and advisors of plant protection products

Current situation

In Latvia, the requirement for training of PPP users and distributors has been in place since the 1990s.

In order to transpose the training requirements of the Directive into national law, the existing procedure was revised, the Law on Plant Protection was amended and on 19 March 2013 Cabinet Regulation No 147 on training of professional users of plant protection products, operators of application of plant protection products, distributors of plant

protection products and plant protection advisors and procedures for issuing certificates¹ (hereinafter – ‘Cabinet Regulation No 147’) was adopted.

The Regulation sets out the procedure for authorising the training of professional users of PPPs, operators of application of PPPs, vendors of PPPs and plant protection advisors, and stipulates that there is a separate training for each category (both initial and recurrent) with a certificate issued after completion of a specific course:

- a certificate of a professional PPP user for handling of PPPs registered under Class 1;
- a certificate of a professional PPP user for handling of PPPs registered under Class 2;
- a certificate of an operator of application of PPP for handling of PPPs registered under Class 2;
- a certificate of a plant protection advisor;
- a certificate of a PPP vendor.

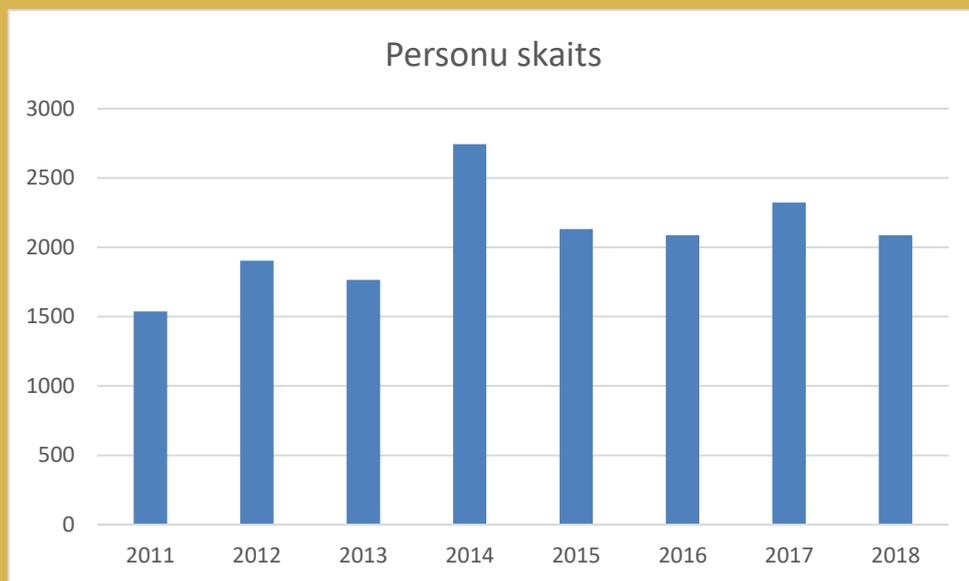


Figure 1. The total number of persons trained between 2011 and 2018.

The current training programmes also provide professional users of PPPs and plant protection advisors with training on the basic principles and requirements of integrated pest management (IPM), focusing on the agrotechnical, mechanical, prophylactic and other alternative pest control methods that underlie IPM.

The SPPS has set up Register of Certificates Issued in the Area of Plant Protection Products in the State Information System for Monitoring of Agricultural Plants.

¹ <https://likumi.lv/doc.php?id=255592>

Aims to be achieved

1. All persons who use PPPs registered under Class 2 in their professional activities are trained and have a valid certificate.
2. All persons providing advice on plant protection have passed a test and this is attested by a valid certificate.
3. Training providers regularly attend seminars organised by the SPPS.

Item No	Task	Description	Implementation date	Responsible entity	Outcome
3.1.1.	Include topics related to plant protection in the curricula of vocational agricultural schools.	It is important to educate young farmers on a safe and responsible use of PPPs, putting particular emphasis on alternatives to harmful pest control methods with chemical PPPs. If the subjects of the plant protection training programme are identical to those listed in Annex to Cabinet Regulation No 147, at the end of the training an opportunity should be provided to take an exam and receive a certificate of a professional user of PPPs. It facilitates the availability of knowledgeable and responsible specialists on the labour market immediately after graduation.	By 31 December 2023	SPPS	Three permits for training of professional users of plant protection products have been issued
3.1.2.	Organise seminars for trainers on current issues in the area of plant protection	Knowledge of the latest developments and changes in the area of plant protection is important for anyone who is involved in plant protection, especially for end-users of PPPs. It is therefore important that users of PPPs receive the latest information in the area of plant protection in every training, both initial and recurrent.	By 31 December 2023	SPPS	6 seminars organised
3.1.3.	Supervise training staff	Assessing the risk factors, scheduled controls should be organised, participating in the study process and evaluating its quality and compliance with the requirements of Cabinet Regulation No 147.	By 31 December 2023	SPPS	Five supervision visits carried out each year
3.1.4.	Improve the training system	Over the last few years, regular changes have affected the area of plant protection in	By 31 December 2021	SPPS	Improved training system

	for all categories of learners	the EU (e.g. many active substances of PPPs are removed from the EU list of active substances; usage and dosage of many PPPs change, etc.). Farmers (users of PPPs) should be aware of these changes in order to use PPPs in accordance with law. Being busy at work, most farmers do not keep abreast of changes, therefore training provides a real opportunity to learn about current issues in the area of plant protection. With the growing importance of integrated cultivation, alternative plant protection methods need to be further highlighted in training programmes, underlining that chemical PPPs should only be used when the above methods have already been tried and there is still real damage to the crop.			
3.1.5.	Establish an online training system for amateurs on a safe use of PPPs	As non-professional users of PPPs are not required by law to be trained, there is a legitimate concern that they will not always use the permitted PPPs registered under Class 3 correctly.	By 31 December 2023	SPPS	System established

Indicator

- **The number of persons trained by category**
- **The number of non-compliances identified during the supervision visits to training staff (*in proportion to all supervision visits*)**
- **The number of farms inspected which use PPPs of Class 2 and where persons holding no valid certificate have been encountered (*in relation to all farms inspected*)**

3.2. Area of action: Monitoring in place for the placement of plant protection products on the market

Current situation

The Law on Plant Protection stipulates that PPPs may be distributed only by those economic operators who have obtained a special permit (license) which grants the right to distribute PPPs. The SPPS reviews the application, inspects the point of sale or storage site and decides on the granting of a special permit (licence) if the point of sale or storage site complies with the requirements of the laws and regulations governing the circulation of PPPs.

Cabinet Regulation No 949 of 13 December 2011 on the placing of plant protection products on the market² lays down the requirements for the placement of PPPs on the market, the criteria to be applied to points of sale, requirements for the sale, import, export, storage and

² <https://likumi.lv/doc.php?id=241852>

transportation of PPPs, the responsibilities of vendors and plant protection advisors, procedures for the provision of information to buyers of PPPs and the contents of such information, and procedures for the control of the circulation of PPPs.

The said Regulation also requires the licensee to ensure that at the point of sale or storage of PPPs there is an employee who has a certificate of a vendor of PPPs or a certificate of a user of PPPs of Class 2 or a certificate of a plant protection advisor, and who provides a buyer with the information on the potential risks to human health and the environment of the PPP in question, in particular on its risks and adverse effects, on the requirements for the use and storage of PPPs and on the safe disposal of used PPP packaging, as well as on other low-risk options for controlling pests, in accordance with the laws and regulations governing the area of plant protection and appropriate to the label of the registered PPP. This requirement is mandatory in cases where a person purchases PPPs of Class 3, and he or she is not a professional user of PPPs, but where the PPP is purchased by a professional user of PPPs, this information should be provided upon the person's request.

The SPPS is responsible for state supervision and control of compliance with the laws and regulations governing the area of distribution of PPPs³. In recent years, significant attention has been paid to the control of illegal PPPs due to the increased risk of the spread of illegal PPPs. There are several reasons accounting for this, namely, the number of PPPs of Class 3 has considerably decreased and many widely used PPPs have been withdrawn from the market after exclusion of several active substances from the EU list of active substances.

³ Annual data on inspection results can be found in the public report of the SPPS: <http://www.vaad.gov.lv/sakums/aktualitates/publiskie-parskati.aspx>

Aims to be achieved

1. Distributors of PPPs at the point of sale are trained personnel with valid certificates.
2. At the points of sale of PPPs of Class 2, at the time of sale the vendor verifies that the buyer holds a valid certificate, and then makes appropriate entry in the accounting system.
3. At the point of sale of PPPs of Class 3 (for non-professional use) a trained employee provides each buyer of PPP with the information on the specific PPP (its usage, storage, risk to human health and the environment).
4. At the point of sale of PPPs of Class 3 (for non-professional use), an employee provides each buyer of PPP with an informative booklet on a safe and responsible use of PPPs.

Item No	Task	Description	Implementation date	Responsible entity	Outcome
3.2.1.	Control distribution of illegal PPPs during operational inspections, paying particular attention to the distribution sites located close to the state border	Regular checks of licensed distribution sites of PPPs take place during scheduled and operational inspections. It is necessary to organise operational inspections at the sites holding no special permit (license) for distribution of PPPs, i.e. in markets, in shops selling household goods, building materials, agricultural goods, in exhibitions, veterinary pharmacies or any other place falling under suspicion of violating the laws and regulations. Illegal and counterfeit PPPs are more likely to be traded in the areas near the state border. Therefore it is necessary to organise special operational inspections in these areas to assess the situation. All these operational inspections are aimed at prevention of the distribution and use of illegal and counterfeit PPPs in Latvia.	By 31 December 2023	SPPS, FVS, Customs Boards	Each year 45 operational inspections with 9 control samples of PPPs taken
3.2.2. New	Prepare informative booklets on a safe and responsible use of PPPs and deliver them to the points of sale where PPPs of	Buyers and users of PPPs of Class 3 (a vegetable garden sector) are not required to undergo any special training, therefore the use of these PPPs is their own responsibility and depends on the knowledge of the particular user. Unfortunately, sometimes the	By 31 December 2021	SPPS	10,000 booklets prepared and distributed

	Class 3 are distributed	users even fail to read the instructions for use before they apply the purchased PPP, which results in improper use of the product causing harm to the environment and to the user's health. Thus, the emphasis should be placed on informing this category of population of the dangers of PPPs and of their proper use only in emergency situations, taking all precautionary measures indicated on the label.			
3.2.3. New	Organise an information campaign for farmers and non-professional users of PPPs on the harmfulness of illegal and counterfeit PPPs	In order to successfully organise an information campaign on illegal and counterfeit PPPs, it is necessary to develop a campaign strategy together with stakeholders. As part of the campaign, information should be disseminated among farmers, organisations and bodies involved, and training should be organised on counterfeit and illegal PPPs.	2019–2023	SPPS, LAMVPPP	Information campaign organised

Indicator

- **The number of licensed sites of PPP distribution inspected which do not have any trained employee holding a valid certificate (*in relation to all sites inspected*)**
- **The number of licensed sites of PPP distribution checked which were found to be selling illegal PPPs (*in relation to all sites inspected*)**
- **The number of informative booklets distributed**
- **The number of non-compliances when PPPs of Classes 1 and 2 are sold to a buyer without a valid certificate**
- **The number of operational inspections where non-compliances related to illegal and counterfeit PPPs were found (*in relation to all inspections*)**

3.3. Area of action: Measures towards informing the public and awareness-raising regarding the use of plant protection products

Current situation

Information of the public.

Under the Law on Plant Protection, the SPPS ensures that all interested persons have an opportunity to obtain information regarding the register of PPPs and on the use of the products included in it, general information on PPPs, the risks associated with their use, the effects of PPPs on human health and the environment, as well as non-chemical alternatives to the use of PPPs. The SPPS posts information about the register of PPPs on its website⁴.

In 2014, the SPPS, engaging non-governmental organisations, set up a working group for development of a public awareness programme Raising Public Awareness of the Use of Plant Protection Products. The said programme was developed in 2014, updated in 2016 and approved in 2017 by the order of the Director of the SPPS⁵. Further meetings of the working

⁴ <http://www.vaad.gov.lv/sakums/registri/augu-aizsardziba/augu-aizsardzibas-lidzeklu-saraksts.aspx>

⁵ <http://www.vaad.gov.lv/sakums/sabiedribas-lidzdaliba/darba-grupas.aspx>

group are planned to evaluate the implementation of the programme and supplement the programme for the next period.

The SPPS has developed a partnership with professional agricultural and horticultural magazines *Saimnieks*, *Agrotops*, *Dārzs un Drava*, *Ievas Dārzs*, *Dārza Pasaule* and *Biškopis* which regularly publish articles on plant protection, including on a safe use of PPPs.

The SPPS constantly prepares responses to the questions posted on the website⁶, provides comments to national and regional media, and answers hotline calls.

On its website, the SPPS regularly prepares and publishes booklets, leaflets, infographics and video tutorials on plant protection issues, including training of users of PPPs, the use of various public registers, a safe use of PPPs and the safety of neighbours living in the vicinity of the fields to be treated⁷.

LAMVPPP in partnership with the SPPS has implemented in Latvia a project on a safe and sustainable use of PPPs⁸ (*SUI – Safe and Sustainable Use Initiative*). As part of the project all stakeholders, including the public, were informed about a safe use of PPPs. During the project, 22 educational seminars on a safe use of PPPs were organised.

Cases of poisoning with plant protection products.

In order to transpose the provisions of the Directive and establish a system for gathering information on cases of acute and chronic poisoning caused by PPPs in those groups of population that may be subjected to regular exposure to PPPs, amendments were made on 27 December 2011 to Cabinet Regulation No 746 of 15 September 2008 on procedures for the establishment, updating and maintenance of a register of patients suffering from certain illnesses⁹. Until the coming into force of the Regulation, there was no official information in Latvia regarding any accidents involving PPPs. According to the data of the Centre for Disease Prevention and Control (CDPC), between 2012 and 2017 there has been one case of poisoning with PPPs once every year (5 times in total). These cases of poisoning did not occur during the direct application of PPP but accidentally, e.g. by swallowing the product.

As regards the direct handling of PPPs on agricultural holdings, according to the laws and regulations on health and safety, an employer is obliged to ensure a safe and healthy workplace for an employee, including when working with PPPs (appropriate certified equipment, personal protective equipment, etc.). The employer is obliged to instruct employees on a safe and correct use of PPPs. Before commencement of work, the employer has to make sure that each employee has understood the instructions given. In addition, the employer must comply with the requirements laid down in the laws and regulations on health and safety at work, e.g. ensure that employees undergo regular medical examinations.

PPP residues in food.

In order to ensure compliance with the maximum permissible residue levels (MRLs) of pesticides (PPPs) in food of plant and animal origin, the members of the EC implement the following annual PPP residue programmes:

- 1) coordinated multiannual control programme of the Community (CMCP);
- 2) multiannual national control programme (MNCP).

The MoA, in cooperation with the services subordinated to it, i.e. the SPPS and the FVS, every year prepares and updates the MNCP, in accordance with Article 30(1) of Regulation No 396/2005/EC¹⁰. The MoA draws up the MNCP based on the results of the CSDP and

⁶ <http://www.vaad.gov.lv/sakums/jautajumi-un-atbildes.aspx>

⁷ <http://www.vaad.gov.lv/sakums/informacija-sabiedribai.aspx>

⁸ <http://laalruta.lv/lv/projekti/drosa-lietosanas-iniciativa>

⁹ https://likumi.lv/doc.php?id=181288&version_date=01.12.2016

¹⁰ <https://eur-lex.europa.eu/eli/reg/2005/396/oj/?locale=LV>

MNCP of previous years and on the use of PPPs in Latvia. The MNCP includes the foodstuffs to be sampled, the number of samples and the plant protection products to be analysed. In order to prevent duplication, the MoA includes in the MNCP only foodstuffs and MRLs that have not been specified in the CMCP for that year. After its approval at the MoA, the updated MNCP for the next three years is then submitted to the EC and EFSA.

The SPPS submits proposals to the MoA as to which active substances of PPPs should be included in the MNCP, whereas the FVS is responsible for the implementation of the CMCP and MNCP. Samples are taken in the sites of retail and wholesale trade, primary production and manufacturing and then analysed at the laboratory of the Scientific Institute of Food Safety, Animal Health and Environment 'BIOR' (hereinafter – 'BIOR').

Every year, the MoA compiles the results of the CMCP and MNCP and, in accordance with Article 30(3) of Regulation No 396/2005/EC, publishes them on its website¹¹.

According to the information collected by the EFSA, 343 food samples were searched for the presence of PPP residues in 2016 in Latvia¹². The results of the sample analyses show that, as regards the presence of PPP residues, the food products available to Latvian consumers are ones of the purest in the Baltic Sea region and also in the EU.

Country	PPP residues		
	Not detected	Within acceptable limits	Exceeding limits
Latvia	73.5%	26.2%	0.3%
Estonia	67.9%	30.4%	1.7%
Lithuania	62.3%	34.2%	3.4%
Finland	54.3%	42.6%	3.1%
Poland	47.9%	48.6%	3.5%
Germany	39.3%	56.8%	3.8%

Figure 2. Results of the analysis of PPP residue samples in 2016.

¹¹ <https://www.zm.gov.lv/partika/statiskas-lapas/pesticidu-atliekas-partika?id=1048#jump>

¹² https://www.efsa.europa.eu/en/interactive_pages/Pesticides_report_2016

Aims to be achieved

1. Information on PPPs prepared and it is available to the public, in particular on the risks arising from incorrect application of PPPs.
2. The public is aware of potential acute or chronic damage to human health and the environment arising from the use of PPPs.
3. Information on the results of the monitoring of PPP residues in food and in plants (plant products) is available to the public.
4. The PPP labels are clear to the user with a description of the use of personal protective equipment and unified warnings about the risks to human health and the environment.
5. In agricultural holdings, the employer provides the employee with personal protective equipment when working with PPPs.
6. The risk associated with the use of PPPs to neighbours and persons not involved in the use of PPPs is reduced to the minimum.

Item No	Task	Description	Implementation date	Responsible entity	Outcomes
3.3.1.	Inform the general public on a safe use of PPPs	Participation in public events and informing the general public about the proper use of PPPs. Publication of informative materials on a safe use of PPPs.	Until 31 December 2023	LAMVPPP SPPS LRATC	Participation in 5 seminars each year
New 3.3.2.	Inform PPP users of potential risks that may arise from an incorrect application of PPPs	Labels of the currently registered PPPs differ, sometimes leading to discussions on safety requirements. Dangers and risks associated with the use of PPPs must be emphasised more on the PPP labels. For the PPP labels to be more user-friendly and understandable, they need to be harmonised.	2020–2023	SPPS	15 labels of PPPs reviewed each year
New 3.3.3.	Conduct a survey on the use of personal protective equipment when handling PPPs; identify deficiencies	A repeated survey of farmers on the use of personal protective equipment when handling PPPs at work after learning about their safe use.	By 31 December 2023	LAMVPPP/ SPPS	A survey carried out, the situation evaluated

3.3.4.	Monitor pesticide residues and inform the public of the results of the monitoring of PPP residues	It is necessary to inform the public about the results of the monitoring of pesticide residues, highlighting the cases where the MRLs were exceeded.	2019–2023	MoA, BIOR	As part of the implementation of the programmes CMCP and MNCP, samples have been taken and the report has been prepared on the monitoring results of PPP residues – once a year
3.3.5. New	Conduct a study in agricultural holdings on safety at work when handling PPPs	In order to understand the situation in agricultural holdings in relation to the use of personal protective equipment, it is necessary to analyse the situation, involving the State Labour Inspectorate that is directly in charge of inspecting occupational safety.	By 31 December 2021	SPPS	A working group meeting was held where the results of the study were analysed
3.3.6. New	Set up a working group to analyse the cases of acute and chronic poisoning with PPPs	In cooperation with the CDPC, it is necessary to assess the system for registration of acute cases of poisoning with PPPs and to consider a possibility of registering illnesses arising from chronic poisoning with PPPs. The existing system of registration of cases of poisoning needs to be improved to make it more accurate, also finding ways how to record cases of chronic poisoning.	2020–2021	SPPS, CDPC	Proposals prepared for improvement of the system
3.3.7.	Continue to record cases of poisoning with PPPs	It is essential to have regular data on possible cases of poisoning to assess the harmful effects of PPPs on human health.	2019–2023	CDPC	Annual record of cases of acute poisoning
3.3.8.	Monitoring of PPPs containing certain active substances	It is necessary to continue monitoring of active substances, e.g. glyphosate, which are subject of growing public concern, and to analyse and publish the obtained results.	2019–2023	SPPS	On average, 200 samples of plants and plant products were taken each year
3.3.9. New	Carry out a study on the effects that active substances of PPPs have on the environmental, water and food quality	It is necessary to carry out a study on the effects that certain active substances have on the environment as well as on the presence of their residues in food. The study should include the most dangerous and widely used active substances. The obtained results must be analysed, published and explained to the public.	2020–2023	MoA	A study performed, results analysed.
3.3.10.	Update the public awareness raising programme	The developed and approved public awareness programme Raising Public Awareness of the Use of Plant Protection Products needs to be reviewed and supplemented by re-convening	2020–2021	SPPS, NGOs	Public awareness raising programme approved

		the working group to discuss the updated programme.			
3.3.11. New	Develop guidelines for informing neighbours of the potential risks of the use of PPPs	It is necessary to develop clear guidance on how the user of PPPs should inform people who live near the fields to be treated about the impending use of PPPs. Users of PPPs should be actively informed about these guidelines. The guidelines should also emphasise that during the vegetation period, unauthorised persons are not allowed to walk in the fields treated with PPPs.	By 31 December 2020	SPPS, NGOs	Guidelines developed
3.3.12. New	Conduct a study on the required waiting time after the spraying of PPPs when it is allowed to enter the treated area	At present, when assessing the risk to the employees working in the areas treated with PPPs, the situation after drying of the sprayed solution is taken into account. In order to develop more detailed recommendations on the waiting time before entering the treated areas, it is necessary to conduct a field study on the specific amount of PPP residues in the field after its treatment.	2020–2023	SPPS, LPPRC	Recommendations developed
3.3.13. New	Conduct a study on the health status of honey bee colonies in Latvia	To date, no comprehensive study on the health status of honey bee colonies has been conducted in Latvia. The use of PPPs is considered to be the cause in most cases when honey bee colonies die. Such a study would provide an objective assessment of honey bee health and, in cases of bee mortality, would allow considering all possible causes, not just the effects of PPPs.	2020–2023	MoA, Latvian Beekeepers' Association, SPPS	A study performed and results analysed
3.3.14. New	Organise an information campaign for protection of pollinating insects	Pollinating insects play an important role in nature, including agriculture, by pollinating crops they increase yields and their quality. So far insufficient attention has been paid to the protection of pollinating insects in Latvia. The use of PPPs affects pollinating insects, therefore it is necessary to prepare and disseminate various types of informative materials to farmers on the ways how to protect pollinating insects. It is advisable to organise the information campaign in spring before the season begins.	2020 –2023	SPPS, Latvian Beekeepers' Association	Three information campaigns held

Indicator

- The number of food samples originating from Latvia in which MRLs are exceeded
- The number of samples of plants and plant products found to be violating the laws and regulations as regards the use of PPPs (in relation to all samples taken)
- The number of cases of acute and chronic poisoning caused by PPPs
- The number of respondents who use personal protective equipment when handling PPPs
- The number of non-compliances on farms where the employer has not provided workers with personal protective equipment
- The number of information campaigns held for protection of pollinating insects
- The number of informative materials on protection of pollinating insects produced and disseminated by type

3.4. Area of action: System of inspection of equipment for the application of plant protection products in place

Current situation

In Latvia, until coming into force of Cabinet Regulation No 491 of 10 July 2012 on PPP application equipment¹³, there was no mandatory requirement for testing of PPP application equipment. On the basis of this Regulation, the SPPS recognizes a certificate issued to the PPP application equipment in another EU Member State, provided that the inspection intervals referred to in this Regulation are complied with and the information on the recognition is prepared and posted on the SPPS website.

On 26 November 2016, the requirement came into force according to which it was allowed to use only such PPP application equipment that was tested and was in good working order.

Currently, PPP application equipment is being actively inspected in Latvia, i.e. field, tree and bush sprayers that are used most widely in the country for professional use of PPPs, and certain standards have been developed for their inspection.

Recommendations for Inspection of Equipment for the Application of Plant Protection Products have been prepared and approved by the SPPS with Order No 1.1-6/108 of 9 December 2014. They are published on the website of the SPPS¹⁴.

¹³ <https://likumi.lv/doc.php?id=250167>

¹⁴ <http://www.vaad.gov.lv/sakums/augu-aizsardziba/augu-aizsardziba/apmacibas-par-augu-aizsardzibas-zinasanu-minimuma-apgusanu.aspx>

Aims to be achieved

1. All PPP application equipment which is intended for professional use has been tested.
2. Professional users of PPPs regularly inspect their PPP application equipment to ensure that it does not cause harm to human health and the environment.

Item No	Task	Description	Implementation date	Responsible entity	Outcomes
3.4.1. New	Prepare an assessment on the use of hand-held and backpack portable sprayers for professional use in Latvia	It is necessary to assess the effects of hand-held and backpack portable sprayers on the environment and health of their users.	By 31 December 2021	SPPS	A decision adopted to amend the existing legislation with respect to exceptions to the inspections of PPP application equipment
3.4.2.	Inspect PPP application equipment	The number of inspected PPP application equipment has increased in recent years, along with the increase in the number of certified inspectors; however, the number of inspected equipment is growing too slowly, therefore it is necessary to create tools for motivating farmers to perform inspections more intensively.	2019–2023	Inspecting entity	Inspected: in 2019 – 500 pieces of equipment in 2020 – 700 pieces of equipment in 2021 – 2000 pieces of equipment in 2022 – 2000 pieces of equipment in 2023 – 2000 pieces of equipment
3.4.3. New	Inform professional users about the benefits of inspected PPP application equipment	In order to encourage farmers to inspect PPP application equipment more actively, an information campaign is needed to inform farmers of the benefits of inspected PPP application equipment in terms of financial savings and reduction of the risk of adverse effects.	2019–2023	SPPS	Information campaign held

Indicator

- **The number of inspected PPP application equipment**
- **The number of inspections where non-compliances were found in PPP application equipment (*in relation to all inspections*)**

3.5. Area of action: Aerial application of plant protection products

Current situation

In Latvia, aerial application of PPPs is prohibited, except in special cases provided for in the laws and regulations governing the use of PPPs.

Cabinet Regulation No 950 of 13 December 2011 laying down rules on the use of plant protection products¹⁵ prescribes the procedure for the preparation of an assessment regarding the potential risks of aerial spraying of PPPs, as well as the procedure for the issuance of a permit for the aerial spraying of a PPP.

Aerial spraying of PPPs is allowed if a permit of the SPPS for aerial spraying of a PPP (hereinafter – ‘the permit’) has been received. The SPPS decides to issue a permit if:

a) there are no viable alternatives, or there are clear advantages for aerial spraying in terms of reduced impacts on human health and the environment compared with the land-based application of plant protection products;

b) risk analysis has been performed and a confirmation has been obtained that the positive effect from such application of a PPP will be greater than the potential risk to the environment and human and animal health;

c) the operator carrying out the aerial spraying has been trained and has obtained a certificate on the right to use PPPs;

d) the application equipment has been inspected and conforms to the requirements specified in the legislation regarding PPP application equipment;

e) the aircraft has been registered in accordance with the procedures specified in the legislation regarding aviation and has been equipped with accessories that constitute the best available technology to reduce spray draft;

f) the area to be treated is not in close proximity to residential areas.

Aims to be achieved

1. Aerial spraying of a PPP is allowed only in special cases.

Item No	Task	Description	Implementation date	Responsible entity	Outcomes
3.5.1. New	Evaluate the use of drones for aerial spraying of a PPP.	By establishing a working group, to assess the suitability and safety of drone deployment for aerial spraying of a PPP.	2022–2023	SPPS	Latvia has outlined its position on the use of remotely piloted aircraft (drones) in aerial spraying of a PPP.

3.6. Area of action: Measures towards the protection of the aquatic environment and drinking water

Current situation

Cabinet Regulation No 950 of 13 December 2011 laying down rules on the use of plant protection products¹⁶ prescribes special measures for the protection of the aquatic

¹⁵ <https://likumi.lv/doc.php?id=241853>

¹⁶ <https://likumi.lv/doc.php?id=241853>

environment and drinking water against the effects of PPPs, providing for the use of such PPPs which have the potential to pose less risk to the environment and human and animal health, which are not classified as hazardous to the aquatic environment and which do not contain priority hazardous substances in accordance with the laws and regulations on water management.

In order to protect the aquatic environment and areas for the extraction of drinking water, PPPs must be used in conformity with the requirements set out in the laws and regulations on protective zones.

The information on those PPPs the labels of which include restrictions on their use in the vicinity of watercourses and water bodies is provided on the website of the SPPS¹⁷.

The Law on Protection Zones lays down several restrictions on the use of PPPs, e.g. it is prohibited to use chemical PPPs as well as to place structures for their storage in a 10 m wide zone up to a surface water body. If a larger distance is indicated on the PPP label, it must be observed.

Protective belts around water extraction sites are established in accordance with Article 9 of the Law on Protection Zones¹⁸ and the requirements of Cabinet Regulation No 43 on methodology for establishment of protective zones around water extraction sites¹⁹ of 20 January 2004. Pursuant to the provisions of these laws and regulations, a bacteriological and chemical protective belt of a strict regime is established around water extraction sites. Protective belts are established around the exiting water extraction sites as well as the water extraction sites to be designed and reconstructed and water supply installations from the water extraction sites to populated areas or freestanding farm buildings. Protective belts are not established if the area around wells, boreholes and springs that are used by individual users of water (natural persons) for their own use on the farm or for the extraction of drinking water is improved preventing infiltration of sewage and water pollution. Restrictions apply in the protection zones around water extraction sites in accordance with Article 39 of the Law on Protection Zones and Cabinet Regulation No 43 on methodology for establishment of protective zones around water extraction sites of 20 January 2004, to ensure the protection of the environment and human health, engineering communications and operation of objects.

Monitoring of surface waters and groundwater. The Water Management Law²⁰ sets out the procedure for water management in Latvia, while Cabinet Regulation No 92 of 17 February 2004 on requirements for the monitoring of surface water, groundwater and protected areas and the development of monitoring programmes²¹ and Cabinet Regulation No 118 of 12 March 2002 on the quality of surface waters and groundwater²² determine the concentration limit values to priority and hazardous substances in surface waters and groundwater.

As part of the Environmental Monitoring Programme 2015–2020²³, which is developed on the basis of the Environmental Policy Guidelines 2014–2020 approved by Cabinet Order No 130 on Environmental Policy Guidelines 2014–2020²⁴, monitoring of the following PPPs is planned at the underground monitoring stations:

1) for priority and hazardous substances in accordance with Cabinet Regulation No 118 of 12 March 2002 on the quality of surface waters and groundwater and Directive

¹⁷ <http://www.vaad.gov.lv/sakums/aktualitates/iespieddarbi.aspx>

¹⁸ <https://likumi.lv/doc.php?id=42348>

¹⁹ <https://likumi.lv/doc.php?id=83439>

²⁰ <https://likumi.lv/doc.php?id=66885>

²¹ <https://likumi.lv/doc.php?id=84753>

²² <https://likumi.lv/doc.php?id=60829>

²³ <https://meteo.lv/lapas/noverojumi/vides-monitoringa-pamatnostadnes-un-programma/vides-monitoringa-programma-2015-2020-gadam/vides-monitoringa-programma-2015-2020-gadam?id=2002&nid=968>

²⁴ <https://likumi.lv/doc.php?id=265262>

2013/39/EU²⁵ (atrazine, simazine, isoproturon, aclonifen, biphenox, aldrin, dieldrin, heptachlor, heptachlor epoxide, cypermethrin, alpha-cypermethrin, trifluralin);

2) for other PPPs used or previously used in Latvia (bentazone, MCPA, promethrin, propazine, 2,4-D, MCPB, dimethoate).

In accordance with Directive 2014/80/EU²⁶ on the protection of groundwater against pollution and deterioration, the concentration of pesticide active substances, including their relevant metabolites, as well as degradation and reaction products, may not exceed 0.1 µg/l, but their sum – 0.5 µg/L.

Under the monitoring programme 2015–2020, it is planned to monitor at the surface monitoring stations those PPPs which, according to Cabinet Regulation No 118 of 12 March 2002 on the quality of surface waters and groundwater, are priority substances²⁷.

The quality of *drinking water* is monitored in Latvia. It consists of two parts, namely, audit monitoring carried out by the Health Inspectorate and routine monitoring carried out by the water supplier. According to Cabinet Regulation No 235 of 29 April 2003 “Mandatory Harmlessness and Quality Requirements for Drinking Water, and the Procedures for Monitoring and Control thereof”, only those plant protection products must be detected in drinking water the presence of which is possible.

The above Regulation is based on Directive 98/93/EC of 3 November 1998 on the quality of water intended for human consumption, which contains the requirement that pesticides (PPP) and their respective metabolites, degradation and reaction products may not exceed 0.10 µg/l, and the aggregate of all the individual pesticides detected in a monitoring procedure and established quantitatively may not exceed a total of 0.50 µg/l.

The results of the surface water and groundwater monitoring carried out by the LEGMC show that most of the active substances of PPPs are not present in the water samples tested, while the most significant contamination is caused by the presence of heptachlor, which is a consequence of Soviet farming.

²⁵ <https://eur-lex.europa.eu/legal-content/LV/TXT/PDF/?uri=CELEX:32013L0039&from=LV>

²⁶ <https://eur-lex.europa.eu/legal-content/LV/TXT/PDF/?uri=CELEX:32014L0080&from=LV>

²⁷ Results of monitoring of groundwater, surface water and drinking water:
<https://www.meteo.lv/lapas/vide/udens/udens-kvalitate/udens-kvalitates-novertejums?&id=1100&nid=433>

Aims to be achieved

1. The deterioration of surface water and groundwater quality from contamination with PPPs has been prevented.

Item No	Task	Description	Implementation date	Responsible entity	Outcomes
3.6.1.	Submit proposals on active substances to be included in water monitoring	In order to make an objective assessment of the quality of water bodies in Latvia, it is necessary to pay more attention to those active substances that are currently used in agriculture. Therefore, the SPPS, when evaluating the current situation regarding the distributed PPPs, submits a proposal to the State Limited Liability Company 'Latvian Environment, Geology and Meteorology Centre' on the substances to be monitored.	2019–2023	SPPS, LEGMC	Proposals submitted.
3.6.2.	Continue monitoring and inform the public about the results of the monitoring of surface waters and groundwater	Latvia abounds in surface water bodies and groundwater, therefore the public should be aware of the quality of those waters. It is necessary to continue monitoring of all types of waters and to inform the public of its results.	2019–2023	LEGMC	Monitoring has been carried out, informative reports have been prepared. An annual report on the quality of Latvia's waters has been prepared, including the information on the monitoring results in accordance with laws and regulations on the quality of surface waters and groundwater
3.6.3.	Take water samples from the springs that are widely used by the public for extraction of drinking water and around which intensive farming takes place	In Latvia, spring water is considered to be one of the cleanest waters to be used for consumption, thus spring water is widely used by the local population. It is necessary to analyse the water from these springs to reveal the presence of the PPPs used in agriculture, since these springs are often surrounded by agricultural lands. In order to find out the most popular springs, it is necessary to identify them by interviewing representative of local authorities.	2019–2023	SPPS	On average, 30 samples each year

3.7. Area of action: Reduction of risks associated with the use of plant protection products in specific areas

Current situation

Protected territories. To stop the decline of biodiversity in Latvia, 333 areas have been included in the *Natura 2000*²⁸ network: 4 strict nature reserves, 4 national parks, 239 nature reserves, 37 nature parks, 9 protected landscape areas, 9 natural landmarks and 24 micro-reserves. These territories are listed in the Annex to the Law on Specially Protected Nature Territories and occupy 12 % or 787,729 ha of the total area of Latvia.

These areas are subject to different protection and management regimes: from minimum restrictions in protected landscape areas to the full prohibition of economic activity in strict nature reserves. According to Cabinet Regulation No 264 of 16 March 2010 on general provisions for the protection and exploitation of specially protected natural areas²⁹, it is prohibited, in protected nature territories, to use mineral fertilisers and chemical PPPs in forest stands (with the exception of the landscape protection and neutral zone of the North Vidzeme Biosphere Reserve, as well as repellents for protection of young stands against grazing and pheromones for restriction of wood-boring insects).

Territories used by the general public. According to Cabinet Regulation No 950 of 13 December 2011 laying down rules on the use of plant protection products³⁰, in territories widely used by the public or also more vulnerable groups (e.g. in a park, sports field, recreational area, school territory, hospital territory) the use of PPPs is permitted only if it is not otherwise possible to restrict the spread of organisms harmful to plants, and if such use of the particular PPP is allowed in its instruction for use. Where possible, a PPP is to be used in territories accessible to the general public during hours when people are not present.

If, however, it is necessary to apply a PPP in such areas, then at least two days before the use of the product the person responsible places a notification regarding the intended use of the PPP on his/her website or in the local newspapers of the municipality or civil parish or publishes such information by other means. Furthermore, following the application of the product, the treated area is demarcated with warning signs providing information on the PPP used, the waiting period and the time when the treated area may be entered again.

²⁸ Information about *Natura 2000*:

http://www.varam.gov.lv/lat/darbibas_veidi/ipasi_aizsargajamas_dabas_teritorijas/natura_2000/

²⁹ <https://likumi.lv/doc.php?id=207283>

³⁰ <https://likumi.lv/doc.php?id=241853>

Aims to be achieved

1. The use of PPPs has been reduced in specific areas.
2. In specific areas, for control of pests preference is given to alternative methods, basic substances or low-risk substances.



Item No	Task	Description	Implementation date	Responsible entity	Outcomes
3.7.1.	Control the use of PPPs in specially protected areas	Regulations for protection and use are developed for protected areas, including certain requirements that need to be observed when using plant protection products and fertilizers.	2019–2023	SPPS	On average, 200 inspections each year
3.7.2. New	Develop recommendations for reduction of the use of PPPs in specific areas	In addition to the use of chemical PPPs, there are alternative methods of plant protection which should be promoted by the managers of farms located in the specific areas where the application of PPPs is limited.	By 31 December 2022	SPPS	Recommendations developed and published on the website of the SPPS

Indicator

- **The number of violations identified during inspections in the specially protected areas (in relation to the total number of inspections)**

3.8. Area of action: Safe handling of plant protection products

Current situation

Safe handling of plant protection products. Pursuant to the Law on Plant Protection persons use plant protection products in accordance with the indications referred to on the labels of such products, the good plant protection practice principles laid down by the European and Mediterranean Plant Protection Organisation (posted on the website of the State Plant Protection Service³¹), and the principles and requirements of integrated pest management defined in the laws and regulation governing the use of PPPs in all the instances provided for therein.

Each PPP is also evaluated for its potential effect on people who could be exposed to the particular PPP, therefore the section ‘Personal Safety’ in the labels of the PPP contains requirements for human protection which require the use of personal protective equipment (PPE).

³¹ <http://www.vaad.gov.lv/sakums/normatvie-akti/augu-aizsardziba.aspx>

According to Paragraph 9 of Cabinet Regulation No 950 of 13 December 2011 laying down rules on the use of plant protection products³², it is allowed to use “PPP’s solely for the purpose and against such harmful organisms, which are referred to on the label, without exceeding the indicated dosage, as well as in conformity with the requirements of the label for dilution of PPPs and preparation of mixtures before use, development stage of crop, number of treatments per season, waiting time from the last treatment until harvesting and restrictions in relation to the protection of human and animal health and the environment”. Besides, the new training programme for professional users of PPPs and operators, puts a greater emphasis than before on occupational safety, measures for protection of the environment, including compliance with the requirements indicated on the labels of PPPs for the protection of users, operators and workers. This Regulation also provides for the liability of individuals. Each user of PPPs as well as operators of PPP application equipment are responsible for the protection of human and animal health and the environment.

In accordance with the Law on Plant Protection, the SPPS carries out the monitoring and control of the use of PPPs³³. In recent years, the public’s negative attitude to plant protection, especially the use of chemical PPPs, has increased. The public is interested to increase the number of inspections in the area of plant protection, but The Public Administration Reform Plan for 2020³⁴ adopted by Cabinet Order No 701, prevents the SPPS from increasing the number of inspectors.

Storage of plant protection products and disposal of their packaging. The abovementioned provisions also lay down minimum requirements for the storage of PPPs on shelves or pallets. It is prohibited to use fuel warehouses, residential or administrative premises, animal housings, structures that may be flooded and cellars, except cellars built above the ground, as sites for the storage of PPPs. PPPs of Class 1 are stored in a closed, ventilated room separately from other PPPs, while also observing other conditions. Until the disposal, packaging of used PPPs is stored together with PPPs and then disposed of in accordance with the provisions on waste management. This requirement can be disregarded if the empty packaging of a used PPP is rinsed three times with clean water during the preparation of the working liquid, and if the rinse water is filled into the working liquid tank, then the used PPP packaging is no longer considered to be hazardous waste.

Handling of plant protection products of Class 3. Cabinet Regulation No 509 of 24 July 2012 on placing on the market of plant protection products according to Regulation No 1107/2009³⁵ specifies the criteria according to which some PPPs are approved for use by non-professional users.

The PPP for non-professional use is registered if it is packed in such packaging the content of which can be used for treatment of no more than 5000 square meters using the minimum registered dosage of the PPP, and if according to the laws and regulations on classification, labelling and packaging of chemicals and mixtures it is not classified as:

- 1) product of acute toxicity of Category 1, 2 or 3;
- 2) carcinogen of Category 1A, 1B and 2;
- 3) mutagen of Category 1A, 1B and 2;
- 4) reproductive toxicant of Category 1A, 1B and 2, etc.

³² <https://likumi.lv/doc.php?id=241853>

³³ The results of the tests are available in the public report of the SPPS: <http://www.vaad.gov.lv/sakums/aktualitates/publiskie-parskati.aspx>

³⁴ <https://likumi.lv/ta/id/295343-par-valsts-parvaldes-reformu-planu-2020>

³⁵ <https://likumi.lv/doc.php?id=250473>

On the basis of EU Regulation No 1272/2008 for mixtures of chemicals, including PPPs, which entered into force on 1 June 2015, in Latvia 11 PPPs that are dangerous to human health were removed from the list of PPPs of Class 3 which were previously available as consumer goods. As a result, the amount of chemical PPPs used in vegetable gardens as well as their impact on the environment and human health have significantly decreased. The reduction in the number of the registered PPPs in this sector is also important because non-professional users of PPPs who can freely buy and use these products are not trained and often use these products incorrectly, disregarding instructions on the labels of PPPs, and thus endangering their own health and safety and the health and safety of the people around and causing significant damage to the environment. In order to increase the awareness of non-professional users of plant protection products of a safe use of PPPs, the informative materials ‘10 Steps on a Safe Use of Plant Protection Products’ and ‘What is a Plant Protection Product?’ have been prepared and are available at the points of sale. These informative materials are also available on the website of the SPPS³⁶.

Aims to be achieved

1. PPPs are used according to the label and in a way that is safe for the public and the environment.
2. Storage and stocks of PPPs do not pose a risk to people and the environment.
3. Users of PPPs of Class 3 are aware of their hazards and of alternative methods for controlling harmful organisms.
4. Empty packaging of PPPs, unused PPPs and container mixtures are disposed of in accordance with the laws and regulations.

Item No	Task	Description	Implementation date	Responsible entity	Outcomes
3.8.1. New	Inform users of PPPs of the potential hazards that may arise from the use of PPPs	Labels of the currently registered PPPs differ, sometimes leading to discussions about safety requirements. Dangers and risks associated with the use of PPPs must be emphasised more on the PPP labels. For the PPP labels to be more user-friendly and understandable, they need to be unified.	2020–2023	SPPS	15 labels of PPPs reviewed each year

³⁶ <http://www.vaad.gov.lv/sakums/informacija-sabiedribai.aspx>

3.8.2.	Control the use of PPPs	In recent years the public interest in plant protection has grown and the attitude has been increasingly negative towards the use of PPPs. It is often argued that the control of the distribution and use of PPPs in the country is inadequate and that the total number of inspections per year is too low. The current capacity of the SPPS prevents increasing the number of inspections in the area of plant protection.	2020–2023	SPPS	Safe use of PPPs is ensured
3.8.3. New	Obtain information about disposal of empty PPP packaging on the farms in order to improve the process of disposal of empty packaging in Latvia	To assess the situation with regard to empty PPP packaging, it is necessary to obtain data that reflect the actual situation on the farms. It can be done by interviewing farmers during the plant protection inspections.	2020–2023	SPPS	Data collected, compiled and analysed
3.8.4. New	Preparation and publication of a brochure on the use of basic substances	Basic substances are harmless substances that are not placed on the market as PPPs and that have been traditionally used in other sectors, e.g. food industry, but nevertheless they are useful in plant protection either directly or in a product consisting of the substance and a simple diluent (such as water). The range of basic substances is constantly expanding and they can be used for plant protection by anyone on organic and integrated farms, as well as in small vegetable gardens.	By 31 December 2021	SPPS	Brochures prepared, published and distributed
3.8.5. New	Promote the establishment of cleaning areas on farms	Preparation of a manual on how to properly construct a cleaning area or a similar structure for washing and rinsing of PPP application equipment and treating of minimal PPP residues. The manual for professional users should be disseminated through training events, seminars, advisory services, etc.	By 31 December 2023	SPPS	Brochures prepared, published and distributed
3.8.6. New	Develop information campaigns on the point source pollution strategy.	Point source pollution is the main cause of the release of PPPs into surface waters. Point source pollution occurs during operations (sprinkler filling, washing,	2019–2023	SPPS, LAMVPPP	Information campaign – dissemination of informative materials prepared in the

	Implement campaigns	leaks, etc.) with PPPs at the same site.			previous period ³⁷ , preparation of new informative materials and seminars
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Indicator

- **The number of PPPs for which the registration of Class 3 has been withdrawn**
- **Reviewed labels of PPPs**
- **The number of brochures on basic substances distributed**
- **The number of cleaning areas built**

3.9. Area of action: Measures towards the implementation of the general principles of integrated pest management

Current situation

In 1999, the Law on Plant Protection was adopted³⁸, and under Article 10 of this Law “persons shall use PPP in accordance with the directions referred to on the labelling of such products, the good plant protection practice principles established by the European and Mediterranean Plant Protection Organisation (EPPO) (published on the website of the State Plant Protection Service³⁹) and the IPM principles and requirements laid down in the laws and regulations governing the use of PPP in all cases provided for therein”. The primary condition for good plant protection practice is to determine whether the harmful organism should be restricted at all. If so, alternative methods for control of harmful organisms should be given preference, with chemical plant protection methods being a last resort. These principles also underlie IPM.

Direct measures for the introduction of IPM in Latvia started already in 2006, when the EC approved programmes for the implementation of an integrated fruit and vegetable system.

So that fruit and vegetable producers could receive support for integrated growth of crops, Cabinet Regulation No 1056 of 15 September 2009 laying down requirements for the integrated growth, storage and labelling of agricultural products and control procedures⁴⁰ was adopted. The Regulation provides that all those who wish to produce crops using IPM methods are included in the Register for the Integrated Growth of Agricultural Products. Every year, the SPPS controls the growers included in the Register in order to verify integrated growth and its compliance with the provisions of the Regulation.

The basic principles and key requirements set out in Article 14 and Annex III to the Directive are included in the chapter ‘General Principles and Requirements of Integrated Pest Management’ of Cabinet Regulation No 1056 of 15 September 2009 (amended on 3 June 2014). The requirements of this chapter are binding on all agricultural operators, including growers of arable crops who use PPPs of Class 2 on their farms.

Since 2013, awareness raising measures for agricultural operators have been implemented for a successful introduction of IPM on farms. The SPPS along with its cooperation partners has developed various tools:

³⁷ <http://laalruta.lv/lv/projekti/udens-aizsardziba---topps>

³⁸ <https://likumi.lv/doc.php?id=51662>

³⁹ <http://www.vaad.gov.lv/sakums/normatvie-akti/augu-aizsardziba.aspx>

⁴⁰ <https://likumi.lv/doc.php?id=197883>

- Guidelines for Integrated Growth of 25 Crop Plants⁴¹.
- Manuals for the development stages (DS) of crops, vegetables, potatoes and fruit plants have been published⁴².
- Nine manuals for determination of diseases and pests have been issued⁴³.
- Three informative videos on integrated pest management have been prepared.
- Critical thresholds of pests have been adjusted to facilitate decision-making process regarding the implementation of plant protection measures⁴⁴.
- Since 2014, every year an informative booklet is published on the current issues in the area of IPM⁴⁵.
- In 2014, the section⁴⁶ for presentation of information on the integrated growth of crops was created on the existing SPPS website.

The SPPS holds on average 25 seminars per year informing the public about the IPM requirements, latest developments and implementation mechanisms. Presentation materials from seminars are available on the SPPS website⁴⁷.

Currently, monitoring of compliance with the requirements of IPM on farms in Latvia is ensured through controls in the area of plant protection and cross compliance checks. Agrochemical testing or soil analysis must be carried out on farms, a fertilisation plan must be drawn up for each farm, statutory rotation of crops must be ensured, a record-keeping system for the fields must be introduced, and the justification for the use of PPPs must be produced, while taking into account:

- The occurrence of a harmful organism in a particular field prior the use of PPPs.
- A development stage of a crop and a harmful organism corresponding to the labels at the time of the use of PPPs, to ensure that the use of PPPs is safe for the crop and the environment.
- The dosage, usage time, the number of applications and waiting time complying with the labels of a registered PPP.

In agriculture, advisory services play an important role, especially with regard to plant protection issues, as only 28.4 % of the managers of agricultural farms (data of 2013) have special higher or vocational secondary qualifications in agriculture. In order to acquire the right to advise users of PPPs, individuals must undergo training, pass an examination and obtain a certificate of an advisor on plant protection entitling its holder to advise on plant protection, including IPM, and on identification and control of organisms harmful to crops.

One of the basic principles of IPM is to use non-chemical PPPs for plant protection whenever possible.

Currently, there are four PPPs containing microorganisms and 47 PPPs containing living organisms on the list of plant protection products registered in the Republic of Latvia. Recently the number of registered PPPs containing previously mentioned organisms has grown.

One alternative for controlling pests and diseases is the use of basic substances for plant protection. In the EU, basic substances are approved under Regulation (EC) No 1107/2009 of 29 October 2009 on the placement of PPPs on the market, while establishing

⁴¹ <http://noverojumi.vaad.gov.lv/integreta-audzesana/integretas-augu-aizsardzibas-kulturspecifiskas-vadlinijas>

⁴² <http://noverojumi.vaad.gov.lv/kulturaugu-fenologija>

⁴³ <http://noverojumi.vaad.gov.lv/jaunumi/informativie-materiali>

⁴⁴ <http://noverojumi.vaad.gov.lv/integreta-audzesana/informacija-lemuma-pienemsanai-par-aal-lietosanu>

⁴⁵ <http://noverojumi.vaad.gov.lv/jaunumi/informativie-materiali>

⁴⁶ <http://noverojumi.vaad.gov.lv>

⁴⁷ <http://noverojumi.vaad.gov.lv/jaunumi/prezentacija>

conditions for the use of these substances (crops, dosages, usage times, waiting times and other criteria). Basic substances are not harmful substances, and they are not placed on the market as PPPs and have been traditionally used in other sectors, such as food industry, but nevertheless they are useful in plant protection either directly or in a product consisting of the substance and a simple diluent (such as water). The range of basic substances is constantly expanding and they can be used for plant protection by anyone on organic and integrated farms, as well as in small vegetable gardens. A regularly updated table of the use of basic substances is available on the website of the SPPS⁴⁸.

Aims to be achieved

1. Farmers are aware of the requirements of IPM and their implementation mechanisms.
2. Farmers have access to a variety of tools to facilitate the implementation of IPM on farms.
3. Farmers are aware of alternative methods of plant protection.
4. Demonstration farms have been set up where farmers can see in practice the application of IPM elements.
5. Registration of low-risk substances is increasing.
6. The use of basic substances is increasing, especially on organic farms and in vegetable gardens.
7. The registration of PPPs containing microbiological and living organisms is increasing.

Item No	Task	Description	Implementation date	Responsible entity	Outcome
3.9.1.	Provide opportunities to professional users of PPPs to learn about the practical implementation of IPM principles	Demonstration of practical experience, allowing farmers to visit actual production farms on farm days, thus obtaining new knowledge and a chance to exchange experience with one other. Demonstration farms are the basis for demonstrating the application of IPM elements in practice. They promote alternative crop growing practices (e.g. agrotechnics, preventive methods, use of basic substances and low-risk plant protection products), including organic farming.	2019–2022	MoA/ LRATC/ LPPRC/ SPPS	29 demonstration themes approved and 56 IPM demonstration farms established
3.9.2.	Organise and conduct informative seminars	One of the priorities of the SPPR is regular provision of information to	2019–2023	SPPS/ LRATC	Each year 15 seminars

⁴⁸ <http://noverojumi.vaad.gov.lv>

	on the implementation of IPM requirements	farmers about the progress of IPM implementation, changes and topical issues related to it, since a knowledgeable farmer is also a responsible farmer.			
3.9.3.	Prepare and publish manuals with descriptions and images of organisms (diseases, pests) harmful to crops	Manuals on crop diseases and pests have proven to be an invaluable aid to farmers when identifying harmful organisms and deciding on their control.	2019–2021	SPPS	Three manuals issued each year
3.9.4.	Review the guidelines for integrated crop production, supplement them with the latest scientific findings, photos of harmful organisms	The guidelines for integrated crop production, which describe the optimal cultivation technology of each crop, paying particular attention to biology of harmful organisms and methods of their control, and focusing on alternative methods, should be used as a guide to crop production.	2021–2023	SPPS	Guidelines supplemented
3.9.5.	Improve the website noverojumi.vaad.gov.lv of the SPPS, supplement it with up-to-date information on integrated crop production and specific descriptions of harmful organisms	The website noverojumi.vaad.gov.lv contains extensive information for farmers: observations of crop diseases and pests in the entire territory of Latvia, forecasts of their spread and development, up-to-date information on the occurrence of harmful organisms and the need to control them, various informative materials and other useful information.	2021–2023	SPPS	Improved and updated the website noverojumi.vaad.gov.lv
3.9.6.	Identify PPPs containing microbiological and living organisms which are allowed in the Member States of the Northern and Central zone	PPPs containing microbiological and living organisms are an alternative to chemical PPPs. Unfortunately, due to the small size of the Latvian market, manufacturers of PPPs are not interested in registering such products, therefore it is necessary to have the information about the registration of these products in other EU Member States in order to ascertain their potential range.	2021–2023	SPPS	Information collected and updated each year
3.9.7.	Promote registration of those products that have a low degree of harmfulness	Opportunities to promote the registration of low-risk products should be explored. The availability of such products should be widely communicated to the users through seminars, training, field days and other events. On the basis of the study of the situation in other EU Member States, to contact holders of microbiological PPP registration and learn about the possibilities of using the procedure for mutual recognition of PPPs to make them available on the Latvian market.	2019–2023	SPPS	By applying the procedure of another country for recognition of PPP registration, permits have been issued for the placing on the market and use of four PPPs containing micro-organisms or other low-risk PPPs
3.9.8.	Facilitate a comparative assessment of PPPs	Economic and practical factors related to plant protection, e.g. the management of resistance risk, should be taken into account in the assessment. Users are informed about	2020–2023	SPPS	Comparative assessment has been made of 15 PPPs

		the substances which should be substituted.			
3.9.9.	Promote the use of basic substances	The range of basic substances is constantly expanding and they can be used for plant protection by anyone on organic and integrated farms, as well as in small vegetable gardens. Therefore their use should be facilitated through regular promotion.	2019–2023	SPPS, LPPRC	The use of basic substances has been promoted through seminars, booklets and practical experience on demonstration farms
3.9.10.	Give exams for issuing certificates of plant protection advisors	Plant protection advisors are responsible for giving good advice to farmers, especially on IPM.	By 31 December 2023	SPPS	Certificates issued every year: 8 in 2019 10 in 2020 10 in 2021 10 in 2022 10 in 2023
3.9.11. New	Summarise and promote alternative methods of plant protection	Preparation of scientifically substantiated information on alternative control methods of harmful organisms and promotion of their implementation are the basis for their application in practice. The efficiency of alternative control methods and their effects on human and animal health and the environment should be analysed as much as possible, in particular additional options and incentives are needed to encourage a practical application of alternative crop protection methods for different types of crops.	2020–2023	SPPS	Promotion of alternative methods of plant protection in seminars, field days, demonstration farms, media etc.
3.9.12. New	Summarise alternative methods to the use of PPPs containing glyphosate and facilitate their implementation	Many widely used PPPs contain the active substance glyphosate, which is a subject of growing public concern. It is necessary to introduce alternative weed control methods to replace the PPPs containing glyphosate.	2020–2022	SPPS	Guidelines developed
3.9.13. New	Summarise plant protection methods permitted on organic farms	A summary of these methods and information on their efficiency is not available to farmers who use permitted organic methods to control harmful organisms.	2020–2022	SPPS	Guidelines developed
3.9.14. New	Create and introduce an electronic field logbook	One of the requirements of IPM is to keep a record of all activities performed on the field, and this is done in a field record-keeping system or a field logbook. At present, it is not mandatory to keep electronic records of the activities performed on the field. Farmers can do it on paper or electronically. Farmers who have chosen to keep their records electronically use various solutions available on the market to plan and record farm operations, therefore the transition to a centralised record-keeping system will take place gradually.	By 31 December 2019	MoA, RSS, SPPS	The electronic field logbook has been introduced

Indicator

- **The number of demonstration farms created**
- **The number visitors to the demonstration farms on field days**
- **The number of seminars on IPM**
- **The number of visits of the website noverojumi.vaad.gov.lv**
- **The number of PPPs containing microbiological and living organisms registered**
- **The number of certificates issued to advisors**
- **The number of checks of basic elements of IPM without significant non-compliances**
- **The number of registered low-risk products**

3.10. Area of action: Indicators for assessing the impact of the use of plant protection products

Current situation

To date, Latvia has had no national indicators for assessing the direct impact of the use of PPPs. However, Cabinet Regulation No 175 of 24 February 2009 on national environmental indicators⁴⁹ lays down environmental indicators that indirectly describe the general state of the environment in the country, and they can also be used for assessment of the environmental impact of the use of PPPs.

This Regulation includes:

- 1) a biodiversity indicator, i.e. the rural bird index, the amphibian species index and the small mammal species index;
- 2) an environmental indicator relating to water quality: the proportion of underground drinking water bodies that provide water supply in line with quality and harmlessness requirements (per cent) and the proportion of bodies of good and high-quality water (in per cent of the total number).

The achievement of the objectives defined by the Directive are expected to be assessed by applying a harmonised risk indicator that is still being developed by the EC and which is expected to be included in Annex IV to the Directive. However, while no single risk indicator has been approved, Member States may continue to use their existing indicators. In Latvia, the results of the individual objectives of the Action Plan are used as national indicators for assessing the achievement of the objectives of the Directive.

1. The amount of active substances of PPPs distributed per hectare of agricultural land

The national objective defined in the Action Plan that would have to be achieved by Latvia in developing and implementing an action plan is to reduce the risks and impact caused by the use of plant protection products on human health and the environment.

The information about the amount of plant protection products distributed to end-users is collected every year in the EU. This figure is used as an indicator to indirectly measure trends in the use of PPPs. The amount of PPPs distributed in Latvia per hectare of agricultural land is one of the lowest in Europe, namely, 0.92 kg/ha, therefore the Action Plan does not foresee the decrease in the plant protection products used in Latvia. The development trends of the indicator during the period of this Action Plan will be evaluated and taken into account in the development of measures for the next programming period.

⁴⁹ <https://likumi.lv/doc.php?id=188492>

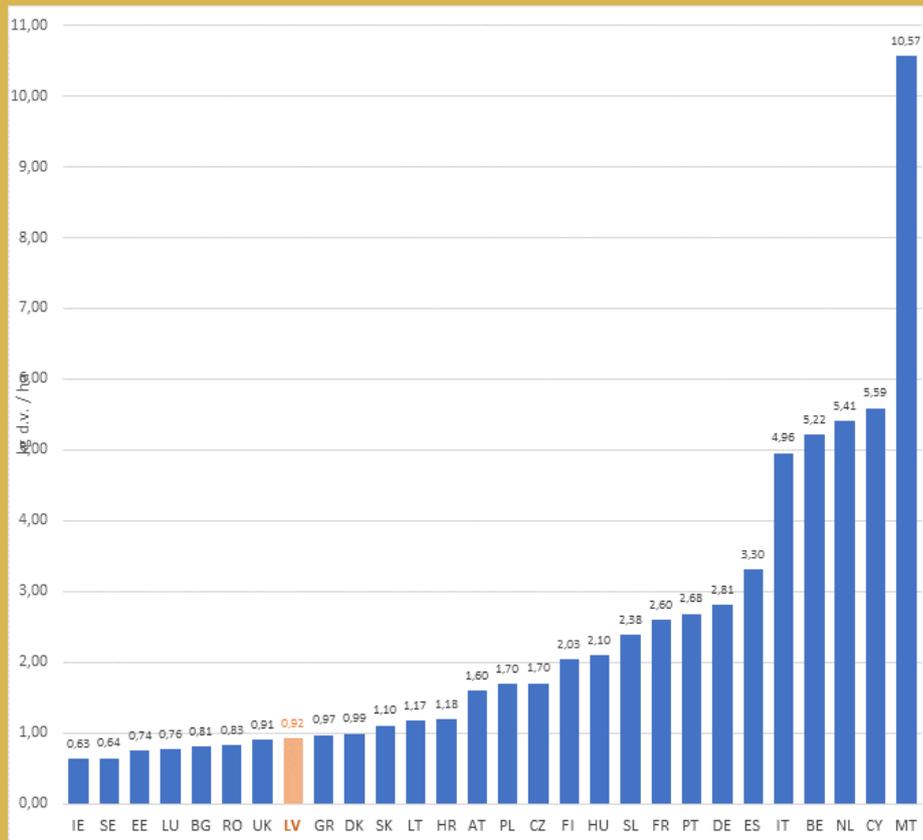


Figure 3. Amount of active substances of PPPs sold to end-users in kg per ha of agricultural land (Eurostat data for 2016)

2. The number of inspected PPP application equipment

The growing number of PPP application equipment inspected in Latvia shows that the environmental impact of faulty and improperly adjusted PPP application equipment is decreasing. In recent years, when carrying out inspections in the area of plant protection, inspectors of the SPPS have found that many farms have purchased new PPP application equipment that is more environmentally friendly and safe for human health. Approximately 40 % of all PPP application equipment registered in Latvia is new equipment purchased in the last five years.

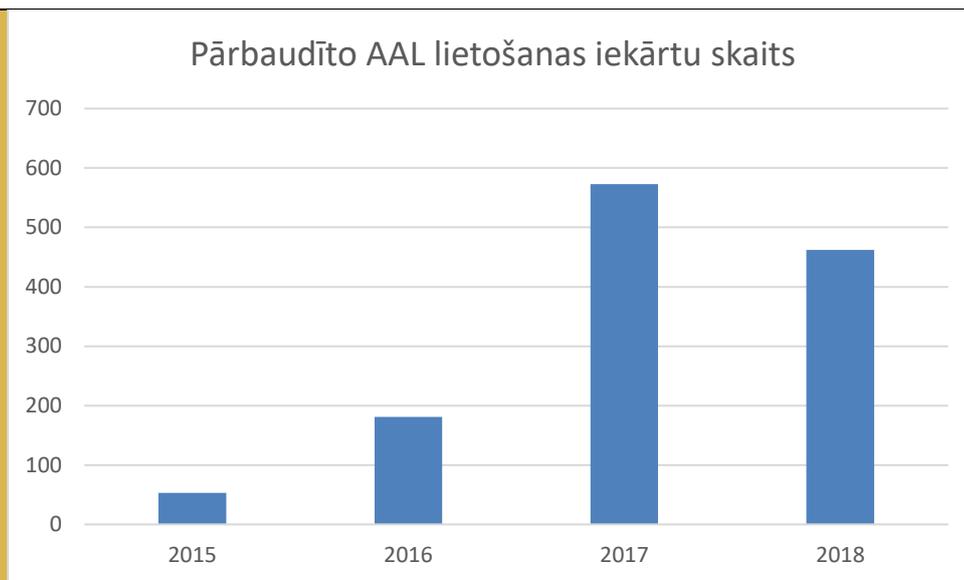


Figure 4. The number of inspected PPP application equipment

3. The number of operators trained in the use of plant protection products.

An operator of the PPP use was introduced as a new category of persons involved in the PPP chain, transposing the requirements of the Directive. Before the amendments were made in regard to the PPP use, they were diluted and mixed mostly by untrained persons without specialist knowledge, the lack of which often endangered the environment and human safety and health. The increasing number of trained operators significantly reduces this risk.

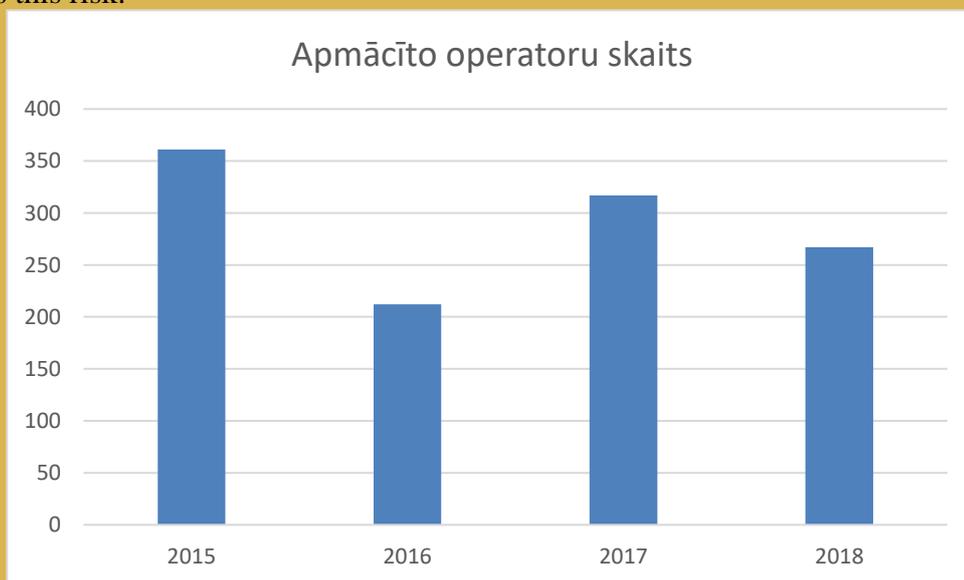


Figure 4. The number of operators trained

4. The number of advisor certificates issued

The amendments to Cabinet Regulation No 147⁵⁰ defined more precisely the status of another category of persons involved in the PPP chain and the level of knowledge required. An advisor's certificate is issued after passing the exam and completing the new

⁵⁰ <https://likumi.lv/doc.php?id=255592>

training programme which is more comprehensive and detailed than before, thus, the advisors trained under the new training system are more professionally knowledgeable and the quality of the advice they provide has increased significantly to the benefit of the farmers who receive this advice and who will have better knowledge of plant protection as a result.



Figure 5. The number of certificates issued to advisors

5. The number of PPPs for which the registration of Class 3 has been withdrawn

The vegetable garden sector is important in Latvia, and in recent years the owners of vegetable gardens have been extensively using PPPs of Class 3, the range of which was quite broad a few years ago. Most of those owners of vegetable gardens did not have knowledge in the area of plant protection, as it is not required by law in Latvia. The lack of knowledge led to the incorrect use of PPPs.

To reduce the risks associated with the incorrect use of PPPs by non-professionals, strict safety requirements have been set for the registration of PPPs of Class 3, resulting in a significant decline in availability of such products to the general public.



Figure 6. The number of PPPs registered under Class 3 between 2012 and 2017.

6. The number of seminars on integrated pest management

Under Article 14 of the Directive, the Member States were required to ensure that all professional users of PPPs would have implemented the general principles of IPM on their farms by 1 January 2014.

The activities related to IPM in Latvia started already in 2006 when in order to promote the introduction of environmentally friendly intensive growth technologies and ensure high-quality fruit and horticultural production in Latvia, [in 2006] the European Commission approved programmes for the implementation of an integrated fruit and vegetable production system. Similar programmes in the fruit and horticulture sector are still being implemented. The situation is different in the arable crop sector since the respective farmers had not heard much about IPM until 1 January 2014 when the Member States had to implement it. Article 14 of the Directive requires the Member States to create the necessary conditions for the implementation of IPM by ensuring that professional users of PPPs have at their disposal information and tools for the implementation of IPM on farms. Seminars are one of the best tools mentioned above for dissemination of information to the farmers about IPM.

Between 2015 and 2018, there were 93 informative seminars on IPM which were attended by more than 1800 farmers. The interest of farmers in such seminars grows stronger each passing year, which shows that farmers are becoming more knowledgeable and willing to implement the requirements of IPM on their farms as efficiently as possible.

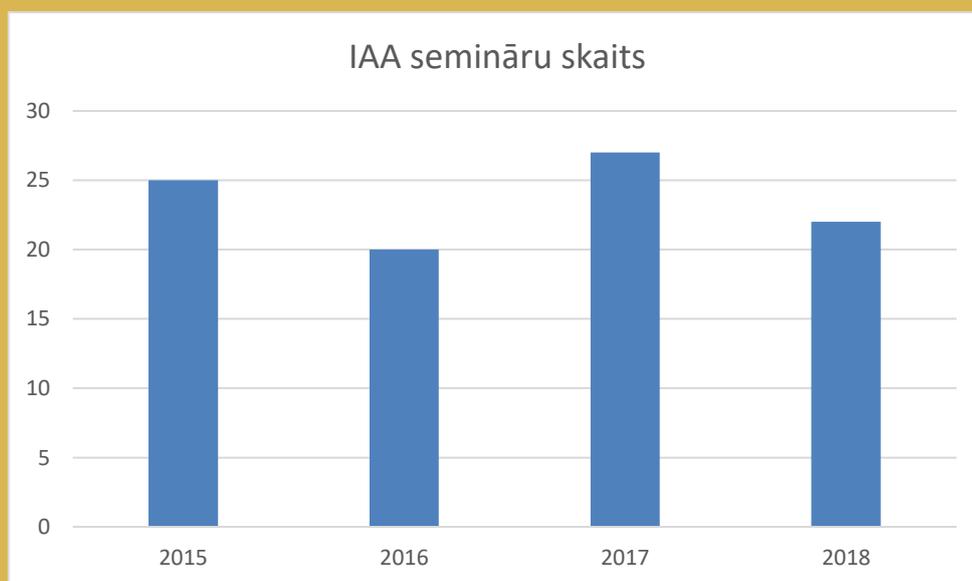
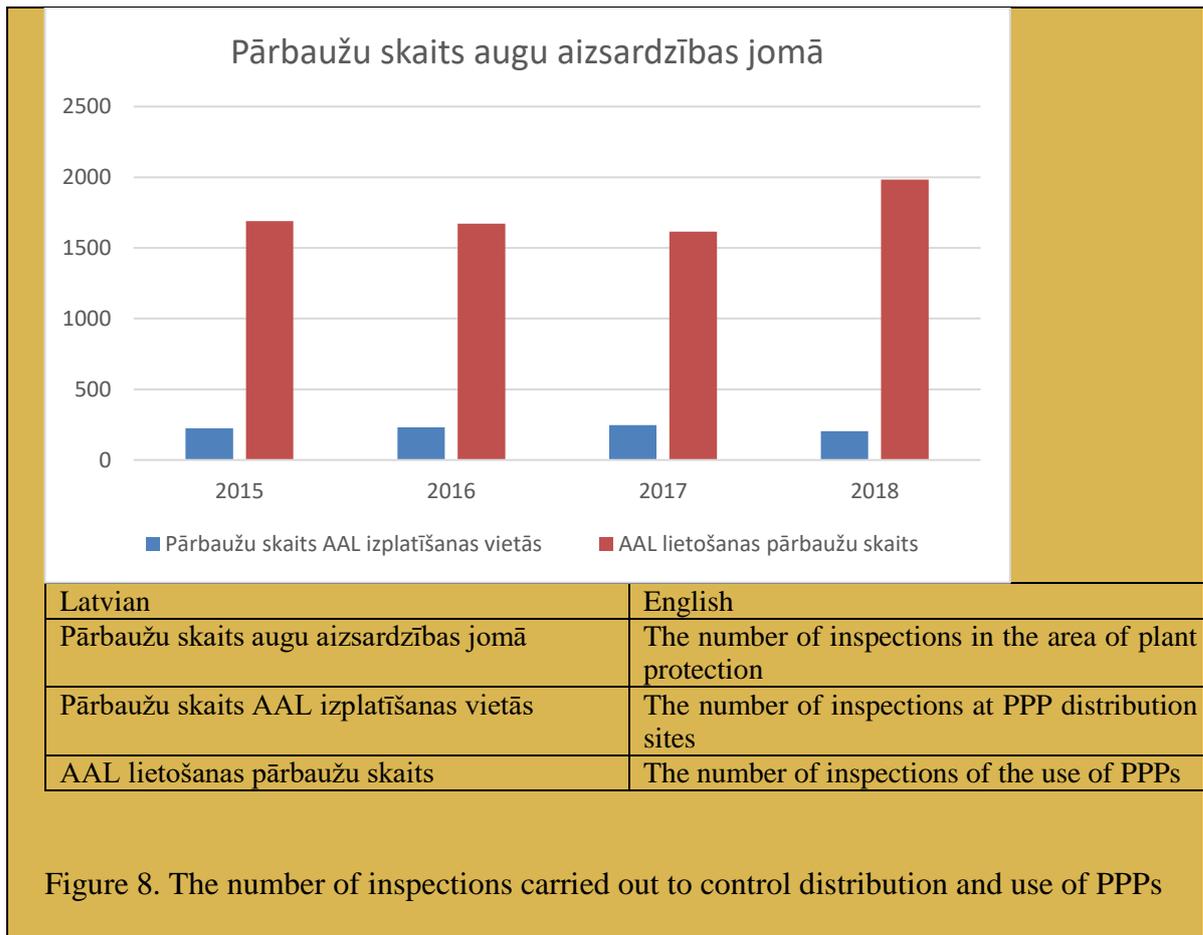


Figure 7. The number of seminars on integrated pest management

7. Plant protection inspections

In accordance with the Law on Plant Protection, the SPPS carries out the supervision and control of the use of PPPs. The SPPS is also responsible for state supervision and control of observation of the laws and regulations in the area of PPP distribution by inspecting the sites of PPP distribution. Both of these controls ensure the implementation of the Directive.



Aims to be achieved

1. Reduce trends in indicators measuring the risk factors associated with the use of PPP.
2. Analysis of results of national risk indicators.

Item No	Task	Description	Implementation date	Responsible entity	Outcome
3.10.1.	Ensure the collection of statistics on the PPPs distributed	The calculation of the harmonised risk indicator is based on statistical data	2019–2023	Central Statistical Bureau/SPPS	Information obtained on PPPs distributed in the country
3.10.2.	Ensure the collection of statistics on the PPPs used	The calculation of the harmonised risk indicator is based on statistical data	2019–2023	Central Statistical Bureau/SPPS	Information obtained on PPPs used in the country
3.10.3.	Collect the data necessary for calculation of indicators as part of supervision measures	Inspectors of the SPPS, who visit the farms, are the ones who obtain the most comprehensive information about the farm during the inspections. The data obtained can be used to calculate the national indicators for the use of PPPs.	2021–2023	SPPS	Information on the use of PPPs is available in the country.
3.10.4. New	Introduce the approved harmonised risk indicators approved by the EC	Adapt the EC-approved harmonised risk indicators to Latvia's conditions. Analyse their dynamics.	2019–2023	SPPS	Indicators introduced. It has been explained to the public why they are necessary and what is the methodology of their calculation

4. Introduction of the Action Plan

- 4.1. The Action Plan is reviewed at least once every five years, assessing the efficiency of implementation of its objectives, their impact on human health and the environment.
- 4.2. At the end of the Action Plan period, a report on its implementation is prepared.
- 4.3. The Ministry of Agriculture is responsible for the implementation, coordination and supervision of the Action Plan.
- 4.4. The SPPS is responsible for informing the European Commission of significant changes to the plan.

Minister of Agriculture

Mr Kaspars Gerhards

Aim of the plan, measures and indicators to be achieved

Aim of the Plan		Reduce risks associated with the use of plant protection products and their impact on human health and the environment				
1. Area of action		Training of the professional users, operators, vendors and advisors of plant protection products				
No	Measure	Outcome	Performance indicator	Responsible entity	Co-responsible entities	Deadline (with 6-month accuracy)
3.1.1.	Include topics related to plant protection in the curricula of vocational agricultural schools.	Three permits for training of professional users of plant protection products have been issued	3	SPPS	-	By 31 December 2023
3.1.2.	Organise seminars for trainers on current issues in the area of plant protection	6 seminars organised	6	SPPS	-	By 31 December 2023 (and consecutive years)
3.1.3.	Supervise training staff	Five supervision visits carried out each year	5	SPPS	-	By 31 December 2023 (and consecutive years)
3.1.4.	Improve the training system for all categories of learners	Improved training system	1	SPPS	-	By 31 December 2021
3.1.5.	Establish an online training system for amateurs on a safe use of PPPs	System established	1	SPPS	-	By 31 December 2023
2. Area of action		Monitoring in place for the placement of plant protection products on the market				

No	Measure	Outcome	Performance indicator	Responsible entity	Co-responsible entities	Deadline (with 6-month accuracy)
3.2.1.	During operational inspections to control distribution of illegal PPPs, paying particular attention to the distribution sites located close to the state border	Each year 45 operational inspections with 9 control samples of PPPs taken	45 inspections, 9 samples	SPPS	FVS, Customs Boards	By 31 December 2023 (and consecutive years)
3.2.2.	Prepare informative booklets on a safe and responsible use of PPPs and deliver them to the points of sale where PPPs of Class 3 are distributed	Booklets prepared and distributed	10,000 pcs.	SPPS	-	By 31 December 2021
3.2.3.	Organise an information campaign for farmers and non-professional users of PPPs on the harmfulness of illegal and counterfeit PPPs	Information campaign organised	1	SPPS	LAMVPPP	2019–2023 (and consecutive years)
3. Area of action		Measures towards informing the public and awareness-raising regarding the use of plant protection products				
No	Measure	Outcome	Performance indicator	Responsible entity	Co-responsible entities	Deadline (with 6-month accuracy)
3.3.1.	Inform the general public on a safe use of PPPs	Participation in 5 seminars each year	15	SPPS	LAMVPPP/ LRATC	By 31 December 2021 (and consecutive years)

3.3.2.	Inform users of PPPs of potential risks that may arise from an incorrect application of PPPs	15 labels of PPPs reviewed each year	60	SPPS	-	2020–2023 (and consecutive years)
3.3.3.	Conduct a survey on the use of personal protective equipment when handling PPPs; identify deficiencies	A survey carried out, the situation evaluated	1	LAMVPPP	SPPS	By 31 December 2021
3.3.4.	Monitor pesticide residues and inform the public of the results of the monitoring of PPP residues	As part of the implementation of the programmes CMCP and MNCP, samples have been taken and the report has been prepared on the monitoring results of PPP residues – once a year	5	MoA	BIOR	2019–2023 (and consecutive years)
3.3.5.	Conduct a study in agricultural holdings on safety at work when handling PPPs	A working group meeting was held where the results of the study were analysed	1	SPPS	-	By 31 December 2022
3.3.6.	Set up a working group to analyse the cases of acute and chronic poisoning with PPPs	Proposals prepared for improvement of the system	1	SPPS	CDPC	2020–2021
3.3.7.	Continue to record cases of poisoning with PPPs	Annual record of cases of acute poisoning	1	CDPC	-	2019–2023

3.3.8.	Monitoring of PPPs containing certain active substances	On average, 200 samples of plants and plant products were taken each year	200	SPPS	-	2019–2023
3.3.9.	Carry out a study on the effects that active substances of PPPs have on the environmental, water and food quality	A study performed, results analysed.	1	MoA	-	2021–2023
3.3.10.	To update the public awareness raising programme	Public awareness raising programme approved	1	SPPS	-	2020–2021
3.3.11.	Develop guidelines for informing neighbours of the potential risks of the use of PPPs	Guidelines developed	1	SPPS	NGOs	By 31 December 2020
3.3.12.	Conduct a study on the required waiting time after the spraying of PPPs when it is allowed to enter the treated area	Recommendations developed	1	SPPS	LPPRC	2021–2023
3.3.13.	Conduct a study on the health status of honey bee colonies in Latvia	A study performed and results analysed	1	MoA	Latvian Beekeepers' Association, SPPS	2021–2023
3.3.14.	Organise an information campaign for protection of pollinating insects	Three information campaigns held	3	SPPS	Latvian Beekeepers' Association	2020–2023 (and consecutive years)
4. Area of action		System of inspection of equipment for the application of plant protection products in place				

No	Measure	Outcome	Performance indicator	Responsible entity	Co-responsible entities	Deadline (with 6-month accuracy)
3.4.1.	Prepare an assessment on the use of hand-held and backpack portable sprayers for professional use in Latvia	A decision adopted to amend the existing legislation with respect to exceptions to the inspections of plant protection product application equipment	1	SPPS	-	By 31 December 2021
3.4.2.	Inspect PPP application equipment	The number of equipment inspected	in 2019 – 500 pieces of equipment; in 2020 – 700 pieces of equipment; in 2021 – 2000 pieces of equipment; in 2022 – 2000 pieces of equipment; in 2023 – 2000 pieces of equipment			
3.4.3.	Inform professional users about the benefits of inspected PPP application equipment	Information campaign held	1	SPPS	-	2019–2023. (and consecutive years)

5. Area of action:		Aerial application of plant protection products				
No	Measure	Outcome	Performance indicator	Responsible entity	Co-responsible entities	Deadline (with 6-month accuracy)
3.5.1.	To evaluate the use of drones for aerial spraying of PPPs.	Latvia has outlined its position on the use of remotely piloted aircraft (drones) in aerial spraying of PPPs.	1	SPPS	-	2022–2023
6. Area of action		Measures for protection of the aquatic environment and drinking water				
No	Measure	Outcome	Performance indicator	Responsible entity	Co-responsible entities	Deadline (with 6-month accuracy)
3.6.1.	Submit proposals on active substances to be included in water monitoring	Proposals submitted	5	SPPS	LEGMC	2019–2023 (and consecutive years)
3.6.2.	Continue monitoring and inform the public about the results of the monitoring of surface waters and groundwater	Monitoring has been carried out, informative reports have been prepared. An annual report on the quality of Latvia's waters has been prepared, including the information on the monitoring results in accordance with laws and regulations on the	6	LEGMC		2019–2023

		quality of surface waters and groundwater				
3.6.3.	Take water samples from the springs that are widely used by the public for extraction of drinking water and around which intensive farming takes place	On average, 30 samples each year	180	SPPS	-	2019–2023 (and consecutive years)
7. Area of action		Reduction of risks associated with the use of plant protection products in specific areas				
No	Measure	Outcome	Performance indicator	Responsible entity	Co-responsible entities	Deadline (with 6-month accuracy)
3.7.1.	Control the use of PPPs in specially protected areas	On average, 200 inspections each year	1200	SPPS	-	2019–2023 (and consecutive years)
3.7.2.	Develop recommendations for reduction of the use of PPPs in specific areas	Recommendations developed and published on the website of the SPPS	1	SPPS	-	By 31 December 2022
8. Area of action		Safe handling of plant protection products				
No	Measure	Outcome	Performance indicator	Responsible entity	Co-responsible entities	Deadline (with 6-month accuracy)
3.8.1.	Inform users of PPPs of the potential hazards that may arise from the use of PPPs	15 labels of PPPs reviewed each year	60	SPPS	-	2020–2023 (and consecutive years)
3.8.2.	Control the use of PPPs	Safe use of PPPs is ensured	3000 additional	SPPS	-	2020–2023 (and consecutive years)

			inspection every year			
3.8.3.	Obtain information about disposal of empty PPP packaging on the farms in order to improve the process of disposal of empty packaging in Latvia	Data collected, compiled and analysed	6000 farms were surveyed	SPPS	-	2020–2023
3.8.4.	Preparation and publication of a brochure on the use of basic substances	Brochures prepared, published and distributed	10,000 pcs.	SPPS	-	By 31 December 2021
3.8.5.	Promote the establishment of cleaning areas on farms	Brochures prepared, published and distributed	5000 pcs.	SPPS	-	By 31 December 2023
3.8.6.	Prepare information campaigns on the point source pollution strategy. Organise campaigns	Information campaign has been organised: dissemination of informative materials prepared in the previous period, preparation of new informative materials and dissemination in seminars	1	LAMVPPP	SPPS	2019–2023 (and consecutive years)
9. Area of action		Measures towards the implementation of the general principles of integrated pest management				
No	Measure	Outcome	Performance indicator	Responsible entity	Co-responsible entities	Deadline (with 6-month accuracy)

3.9.1.	Provide opportunities to professional users of PPPs to learn about the practical implementation of principles of IPM	29 demonstration themes approved and 56 IPM demonstration farms established	29 themes and 56 demonstration farms	MoA	LRATC/ LPPRC/ SPPS	2019–2023
3.9.2.	Organise and conduct informative seminars on the implementation of IPM requirements	Each year 15 seminars	75	SPPS	LRATC	2019–2023 (and consecutive years)
3.9.3.	Prepare and publish manuals with descriptions and images of organisms (diseases, pests) harmful to crops	Issued three manuals each year	9	SPPS	-	2019–2021
3.9.4.	Review the guidelines for integrated crop production, supplement them with the latest scientific findings, photos of harmful organisms	Guidelines supplemented	25	SPPS	-	2021–2023 (and consecutive years)
3.9.5.	Improve the website noverojumi.vaad.gov.lv of the SPPS, supplement it with up-to-date information on integrated crop production and specific descriptions of harmful organisms	Improved and updated website noverojumi.vaad.gov.lv	1	SPPS	-	2021–2023 (and consecutive years)
3.9.6.	Identify PPPs containing microbiological and living organisms which are allowed in	Information collected and updated each year	3	SPPS	-	2021–2023 (and consecutive years)

	the Member States of the Northern and Central zone					
3.9.7.	Promote registration of those products that have a low degree of harmfulness	By applying the procedure of another country for recognition of PPP registration, permits have been issued for the placing on the market and use of four PPPs containing microorganisms or other low-risk PPPs	4	SPPS	-	2019–2023 (and consecutive years)
3.9.8.	Facilitate a comparative assessment of PPPs	Comparative assessment has been made of 15 PPPs	15	SPPS	-	2020–2023 (and consecutive years)
3.9.9.	Promote the use of basic substances	The use of basic substances has been promoted through seminars, booklets and practical experience on demonstration farms	1	SPPS	-	2019–2023 (and consecutive years)
3.9.10.	Give exams for issuing certificates of plant protection advisors	Certificates issued every year	8 in 2019 10 in 2020 10 in 2021 10 in 2022 10 in 2023	SPPS	-	By 31 December 2023 (and consecutive years)
3.9.11.	Summarise and promote alternative methods of plant protection	Promotion of alternative methods of plant protection in seminars, on	1	SPPS	-	2020–2023 (and consecutive years)

		field days, on demonstration farms, in mass media etc.				
3.9.12.	Summarise alternative methods to the use of PPP containing glyphosate and facilitate their implementation	Guidelines developed	1	SPPS	-	2020–2022
3.9.13.	Summarise plant protection methods authorised on organic farms	Guidelines developed	1	SPPS	-	2020–2022
3.9.14.	Create and introduce an electronic field logbook	The electronic field logbook has been introduced	1	SPPS	-	By 31 December 2021
10. Area of action		Indicators for assessing the impact of the use of plant protection products				
3.10.1.	Ensure the collection of statistics on the distributed PPPs	Information obtained on PPPs distributed in the country	6 times	SPPS	CSB	2019–2023 (and consecutive years)
3.10.2.	Ensure the collection of statistics on the used PPPs	Information obtained on PPPs used in the country	1 time	SPPS	CSB	2019–2023 (and consecutive years)
3.10.3.	Collect the data necessary for calculation of indicators as part of supervision measures	Information on the use of PPPs is available in the country.	4500 farms were surveyed	SPPS	-	2021–2023 (and consecutive years)
3.10.4.	Introduce the approved harmonised risk indicators approved by the EC	Indicators introduced. The public has been explained why they are necessary and what is the	1	SPPS	-	2019–2023

		methodology of their calculation				
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