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Warsaw, 25 July 2018

Item 723

NOTICE

OF THE MINISTER OF AGRICULTURE AND RURAL DEVELOPMENT¹⁾

of 11 July 2018

**on the National Action Plan to Reduce the Risk Associated with the Use of Plant Protection Products
2018-2022**

Pursuant to Article 47(5) of the Plant Protection Products Act of 8 March 2013 (Journal of Laws of 2018, item 1310), the National Action Plan to Reduce the Risk Associated with the Use of Plant Protection Products 2018-2022 is hereby published. The Plan is attached in the Annex to this Notice.

Minister of Agriculture and Rural Development: pp. *R. Romanowski*

¹⁾ The Minister of Agriculture and Rural Development heads the Agriculture Branch of the Central Government Administration pursuant to § 1(2) point 1 of the Regulation of the Prime Minister of 27 June 2018 regarding the detailed scope of the activity of the Minister of Agriculture and Rural Development (Journal of Laws, item 1250).

Annex to the Notice of the Minister of Agriculture
and Rural Development of 11 July 2018 (item 723)

**NATIONAL ACTION PLAN TO REDUCE THE RISK ASSOCIATED WITH THE USE OF
PLANT PROTECTION PRODUCTS 2018-2022**

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I. Introduction

The National Action Plan to Reduce the Risk Associated with the Use of Plant Protection Products, hereinafter referred to as the “National Action Plan”, has been prepared in fulfilment of the obligations laid down by Directive 2009/128/EC of the European Parliament and of the Council of 21 October 2009 establishing a framework for Community action to achieve the sustainable use of pesticides (OJ L 309, 24.11.2009, p. 71, as amended), hereinafter referred to as “Directive 2009/128/EC”.

In Poland, the first National Action Plan was adopted on 6 May 2013 and published on 18 June 2013 in the *Monitor Polski* Official Gazette of the Republic of Poland (*Monitor Polski*, item 536).

The National Action Plan was published under the legal basis established by Article 47(5) of the Plant Protection Products Act 8 March 2013 (Journal of Laws of 2013, item 1310) and its implementation spanned the years 2013-2017.

Pursuant to Article 47(6) point 2 of the Plant Protection Products Act of 8 March 2013, the minister competent for agriculture was obliged to review the National Action Plan at intervals not longer than 5 years.

The purpose of the National Action Plan was to promote the general principles of integrated pest management and to prevent risks associated with the use of PPPs. The underlying assumption was that the implementation of the principles of integrated pest management, in particular by promoting non-chemical methods of plant protection, will help reduce the dependence of plant production on chemical PPPs, which will, in turn, mitigate the risks associated with their use.

According to the assumptions, the degree of completion of the main objectives of the National Action Plan are to be assessed by measures of a general nature, while the individual actions adopted to achieve these objectives – by specific measures. The general measures are as follows:

- 1) compliance by professional users of PPPs with the general principles of integrated pest management – in 2017 the value of the measure should be at least 90% (according to data of the State Plant Health and Seed Inspection Service);
- 2) percentage share of exceedances of the maximum residue limits (MRLs) of PPPs in food of plant origin – during the period spanned by the National Action Plan, the value of the measure should remain below 1% (according to data of the State Sanitary Inspectorate);
- 3) percentage share of exceedances of the maximum residue limits (MRLs) of PPPs in feedstuffs and food of animal origin – during the period spanned by the National Action Plan, the value of the measure should remain below 0.1% (according to data of the Veterinary Inspectorate).

The activities planned for the years 2013-2017 have been delivered in a consistent manner, which is reflected by the values of the measures adopted to evaluate attainment of the objectives of the National Action Plan.

According to data of the State Plant Health and Seed Inspection Service, in 2014, from 71.8% to 95.3% of professional users of PPPs complied with the various requirements of integrated pest management. In 2015, this was from 69.2% to 97.2%, while in 2016 from 67.3% to 95.7%.

In 2013-2016, the State Sanitary Inspectorate found exceedances of the maximum residue limits of PPPs (taking into account the uncertainty of the result) in 0.7%, 0.9%, 1.5% and 1.2% of samples of Polish food products of plant origin, respectively.

Thus, the targets of the National Action Plan for 2013-2017 were close to being achieved. Even though 2015 and 2016 saw slight exceedances of the targeted values of the indicator (by 0.5% and 0.2%, respectively), in 2013 and 2014 the values were much lower than assumed. Thus, the average value of the indicator over the period spanned by the National Action Plan (1.075%) remained on the foreseen level. In this context, it must be pointed out that according to the 2015 European Union report on pesticide residues in food, published by the European Food Safety Authority (EFSA Journal 2017;15(4):4791), in 2015, 1.6% of food demonstrated exceedances of the maximum residue limits of PPPs (taking into account the uncertainty of the result). As can be seen, the values attained in Poland are below this value.

In 2013 and 2014, the Veterinary Inspectorate did not find exceedances of the maximum residue limits of PPPs in any of the samples of feed and food of animal origin it tested. In 2015, 4 samples of feed failed to

meet the legal requirements, and 1 sample of fat tissue of a horse and 1 sample of fat tissue of a boar yielded non-compliant results in terms of PCB content. One sample of fat tissue of a boar was also found to be non-compliant in terms of PCB content in 2016. Also in this context, the objectives of the National Action Plan 2013-2017 should be considered to have been achieved, since it was only in one year that there was a slight exceedance of the planned target of the indicator (by 0.16%), with the values in the remaining years significantly below the targets. Notably, the average value of the indicator (0.075%) was much below the target.

As is shown by the above data, the objectives of the National Action Plan set for the years 2013-2017 have been achieved, and the risk associated with the use of PPPs has been minimised. Food produced in Poland is practically free from exceedances of the maximum residue limits of PPPs, which means that it is safe for consumers. In addition, agricultural producers are aware of the principles of integrated pest management and apply them in their farming practices.

The reduction of the risks associated with the use of PPPs has been achieved, on the one hand, by the adoption of specific provisions governing the marketing and use of PPPs, and on the other hand, by delivery of information and educational activities to agricultural producers and other PPP users, as well as by giving them tools for applying the principles of integrated pest management (integrated pest management methodologies for individual crops, pest management programmes, decision support schemes in pest management, guides to good plant protection practices, the Pest Monitoring System, and advice).

In particular, the following should be highlighted in this context:

- 1) introduction and consistent improvement of the PPP training system;
- 2) introduction and consistent improvement of the testing system for pesticide application equipment;
- 3) introduction of effective mechanisms of control and supervision over the marketing and use of PPPs.

In most of the areas, identified risks have been significantly mitigated, and in some, they have been eliminated altogether (as in the case of aerial pesticide spraying).

For the most part, the objectives and actions set out in this National Action Plan which work towards further mitigation of the risks associated with the use of PPPs are a continuation of the measures implemented in 2013-2017. The NAP also takes into account the experience and results following from the implementation of the National Action Plan for 2013-2017 and the findings of the mission of the European Commission carried out in Poland from 7 to 14 June 2017 in order to evaluate the implementation of measures to achieve the sustainable use of pesticides, as a consequence of which some of the previous measures have been modified. New actions responding to present-day needs linked to reducing the risk associated with the use of PPPs have also been added.

The tasks defined in the National Action Plan will be financed with funds allocated to the individual units of the public administration and institutions under the Budget Acts for the individual years, subject to the limits of financial resources available to the respective institutions and budgets managed by budget administrators.

II. Background information about Polish agriculture

The Republic of Poland is a country with an area of 312 679 km² and a population of 38 433 000. Poland is characterised by a large natural and environmental diversity. At the end of 2017, the surface area of legally protected nature was 139 057 km², which accounted for 44.4% of the country's area. The 23 national parks with an area of 7657 km² represent the strictest form of nature conservation in Poland, accounting for 2.4% of the country's area. At the end of 2017, legally protected sites and areas of unique natural interest (source: General Directorate for Environmental Protection, Central Register of Nature Conservation Forms) also included:

- 1) 1497 Nature Reserves (rezerваты przyrody) with an area of 1921 km²;
- 2) 122 Countryside Parks (parki krajobrazowe) with an area of 41 333 km²;
- 3) 404 Protected Landscape Areas (obszary chronionego krajobrazu) with an area of 72 806 km²;
- 4) 7629 Protected Ecosystems (użytki ekologiczne) with an area of 606 km²;
- 5) 177 Geological Sites (stanowiska dokumentacyjne) with an area of 10 km²;
- 6) 260 Nature and Landscape Sites (zespoły przyrodniczo-krajobrazowe) with an area of 1 228 km²;
- 7) 31 122 Historic Tree and Rock Formation Monuments (pomniki przyrody), including 129 monuments of the surface type with a total area of 4 km²;
- 8) 987 Natura 2000 sites with an area of 68 373 km².

According to the 2015 land survey, utilisable agricultural and forest areas occupied 90% of the country's territory. Utilisable agricultural land accounted for 59%, forests and copses – 31%, while other areas – 10%. Out of the total utilisable agricultural area, arable land accounted for 73%, permanent grassland for 21%, and orchards for about 2%. In the years 2000-2015, the utilisable agricultural area shrank, with a simultaneous increase in the area of forests. In 2015, the utilisable agricultural area was 18.6 million ha, i.e. 0.5 million ha smaller than in 2000, while the area of forests and copses grew over the same period by 0.6 million ha, reaching 9.7 million ha. The greatest changes were observed in Protected Ecosystems, the area of which increased from 82 700 ha in 2004 to 535 200 ha in 2016. In parallel, the number of organic farmers increased from 3705 to 22 435 entities.

For a decade, there has been a significant drop in set-aside and fallow land within arable areas. In the years 2000-2015, the area of fallow land shrank from 1.3 million ha to approx. 0.1 million ha (source: Central Statistical Office, Environmental Protection 2016).

The quality of utilisable agricultural land in Poland is low, lower than on average in the EU. The high proportion of poor and acidified soils reduces the agricultural usability of such land. The share of light soils, which are characterised by high sandiness, is twice as high as the EU average (60.8% in Poland v. 31.8% in the EU). In Poland, the Soil Bonitation Index, which is the ratio of hectare units to physical utilisable agricultural area, is 0.82. Poor soils and additionally worse climatic conditions translate into lower land productivity compared to the EU average.

Polish agriculture is characterised by high fragmentation. According to data of the Central Statistical Office, in 2016 there were 1 410 700 agricultural holdings which conducted agricultural activities in Poland. Out of the total number of agricultural holdings, about 74% were small farms with an area of 1-10 ha of utilisable agricultural land, which utilised about 28% of the utilisable agricultural area in Poland. The share of larger holdings, i.e. those with an area of more than 10 ha of utilisable agricultural land, was around 24%. These holdings accounted for about 72% of utilised land. There have been gradual changes in the breakdown of agricultural holdings, which have involved, in the first place, a drop in the number of farms with an area of 1-2 ha of utilisable agricultural land and a parallel increase in the number of large farms. Thanks to this, the average area of utilisable agricultural land per holding has been on the rise, reaching 10.3 ha in 2016.

The share of crops predominated in the total area of utilisable agricultural land, amounting to 73.2%, while the shares of permanent meadows and permanent pastures were 18.6% and 3.3%, respectively. In accordance with data published by the Central Statistical Office, the area of crops was 10.6 million ha in 2016. The largest group of crops in the total crop area is represented by cereals, with a share of 70.6% in the total crop area, followed by fodder plants – 10.4%, and industrial plants – 10.3%.

In the 2015 Global Food Security Index, which investigates, inter alia, the affordability, availability of food, and its quality and safety, Poland ranked 28th against the backdrop of the 109 countries surveyed. Poland obtained the maximum score of 100 for programmes to improve food safety, access to financing for

farmers, nutritional standards, and food safety.

In 2014, the total sales volume of pesticides in the European Union amounted to nearly 400 000 tonnes. The greatest quantities of pesticides were sold in Spain (19.9%), France (19.0%), Italy (16.2%), Germany (11.6%), and Poland (5.9%), which cumulatively accounted for 72.6 % of total sales of pesticides in the European Union. At the same time, Poland ranks 12th in terms of PPPs sold per surface area of UAA where PPPs are used (source: EUROSTAT – Agriculture, forestry and fishery statistics – 2016 edition).

Compared to highly developed EU countries, Poland has been observing a steady increase in the efficiency and effectiveness of agricultural production, while prioritising sustainable development. Poland owes this, *inter alia*, to EU structural funding allocated for instruments that support improving the competitiveness of agricultural holdings through the modernisation of their technical production infrastructure, adaptation of the profile, scale and quality of production to market needs, and improving food safety, animal welfare, environmental protection, and work safety. In addition, thanks to the implementation of the principles of cross-compliance, the environmental standard of the agricultural practice has been rising, too.

Since the 1950s, the development of agricultural production and food economy in Poland has been inextricably linked to the use of PPPs. However, it must be emphasised that their use is maintained at a lower level than in other EU countries with highly developed agriculture. Therefore, in the years to follow, the current upward trend in the sale volumes of PPPs per protected UAA is expected to continue. However, it is important that the risks associated with their use should be minimised.

In this connection, the objectives set out in the National Action Plan are oriented towards reducing the risk associated with the use of PPPs and their rational and sustainable use, which should not be equated with quantitative reduction in the use of such products. This follows from the fact that objectives related to the mitigation of risks associated with the protection of crops must be achieved while maintaining the competitiveness of Polish agriculture.

III. Implementation of the National Action Plan in 2013-2016

The purpose of the delivery of the First National Action Plan was to promote the general principles of integrated pest management and to prevent risks associated with the use of PPPs.

The National Action Plan included activities of the public administration and state institutions aimed at providing support, primarily to farmers, in mitigating the hazards arising from the use of plant protection products.

Nine actions were implemented under the National Action Plan:

- 1) Dissemination of the general principles of IPM;
- 2) Modifying the system of training for professional users of PPPs, PPP dealers and advisors;
- 3) Modifying the system for testing the technical condition of equipment for the application of PPPs;
- 4) Increasing awareness of the public regarding PPPs;
- 5) Ensuring protection of minor crops;
- 6) Providing effective supervision of the circulation and use of PPPs;
- 7) Analysis of the risk associated with the use of PPPs;
- 8) Promoting good practices for safe use of PPPs;
- 9) Using scientific research to promote integrated pest management and reduce the risk associated with the use of PPPs.

Detailed reports on the implementation of the National Action Plan are published annually on the website of the Ministry of Agriculture and Rural Development.

Because of the reporting systems used by the public administration units involved in the implementation of the tasks, at the time of drafting of this National Action, reporting data is available for 2013-2016.

Under **Action 1** of the National Action Plan, the principles of integrated pest management were disseminated, in particular through:

- 1) setting up an Internet website dedicated to integrated pest management called the Pest Monitoring Platform, which is a forum and tool for sharing experiences and transferring knowledge between science and practice;
- 2) providing agricultural producers and advisors with tools necessary to fulfil the requirements of integrated pest management, such as integrated pest management methodologies for various crops (altogether, 69 methodologies were prepared), decision support systems in crop protection, Pest Signalling Guides, integrated pest management programmes, post-registration variety testing;
- 3) promoting the Integrated Plant Production Scheme – a voluntary food quality and certification scheme based on the principles of integrated pest management;
- 4) organisation of specialised training:
 - a) as part of the system of mandatory training for professional users of PPPs, free training was provided on integrated pest management to 50 000 people and in integrated plant production to 5000 people,
 - b) training for farmers on the importance of seed for integrated pest management (the training was completed by 618 people),
 - c) training delivered by the Institute of Plant Protection – National Research Institute as part of a multi-annual programme: training on integrated pest management addressed mainly to advisors was organised (1400 participants),
 - d) training for advisors delivered by other entities, such as the Agricultural Advisory Centre in Brwinów and the Research Institute of Horticulture;
- 5) distribution of information materials – a total of 147 000 leaflets and 29 000 posters were prepared;
- 6) modification of curricula in agricultural schools;
- 7) participation in conferences, seminars and trade fairs and exhibitions.

Under **Action 2**, the system of mandatory training for users of plant protection products, distributors of PPPs, and advisors was modified. In 2013-2016, there was a total of 14 942 training activities, which were completed by 363 723 people.

Under **Action 3**, the system for mandatory testing of the working order of PAE was modified. The system

was extended to cover – in addition to field and orchard sprayers – also aerial spraying equipment, equipment for the application of PPPs in the railway industry, seed treatment machines, installations for the application of pesticides in greenhouses and plastic tunnels, as well as other equipment for the application of plant protection products with the capacity of the tank of over 30 l. Overall, in the years 2013-2016, 266 454 pieces of pesticide application equipment were tested. In addition, 7640 pieces of new equipment which did not require testing yet were inventoried.

The purpose of **Action 4** was to raise public awareness of plant protection products, including through information campaigns on safe use of PPPs. Information in this respect was presented at conferences and published in the press.

The objective of **Action 5** was to ensure the protection of minor crops. In 2013-2016, 155 decisions were issued to extend the scope of authorisations for the use of plant protection products to include minor crops at the request of industry organisations and producer groups, research institutes, and PPP manufacturers.

Action 6 was aimed at ensuring effective supervision over the marketing and use of plant protection products. Each year, the State Plant Health and Seed Inspection Service conducted about 6000 checks of the marketing of plant protection products and approximately 23 000 checks of the use of PPPs, which included testing agricultural crops for PPP residues (approximately 2800 samples per annum). As part of its work, the Institute of Plant Protection – National Research Institute developed mathematical and statistical tools to enable the Inspectorate to conduct risk assessments when planning its checks.

As part of **Action 7** – Analysis of the risk associated with the use of PPPs, the following were conducted:

- 1) checks of food of plant origin for contamination with PPPs, carried out by bodies of the State Sanitary Inspectorate (approx. 2200 samples annually);
- 2) checks of feed for contamination with PPPs, carried out by the Veterinary Inspectorate (approx. 340 samples annually);
- 3) checks of food of animal origin for contamination with PPPs, carried out by the Veterinary Inspectorate (approx. 1500 samples annually);
- 4) monitoring of water intended for human consumption, conducted by the State Sanitary Inspectorate;
- 5) monitoring of surface water, groundwater and bottom sediments conducted by the Environmental Inspectorate, and from 2015, monitoring of waters carried out by the Institute of Plant Protection – National Research Institute and Research Institute of Horticulture in partnership with the Provincial Environmental Inspectorates in Warsaw and Poznań.

The Action also involved developing indicators for risks associated with the use of PPPs under a multi-annual programme delivered by the Institute of Plant Protection – National Research Institute. In the years to come, the indicators will be helpful in analysing risks linked to the use of PPPs and will form a basis for managing the risks and for PPP policy making. In addition, the Action included establishing a system for collecting information about cases of poisoning with pesticides in humans and bees.

Safe use of plant protection products largely depends on the awareness, expertise and skills of the people who perform treatments. Hence the importance of the delivery of **Action 8**, which was dedicated to the promotion of good practices of safe use of PPPs. The Action involved the preparation and distribution of Good Plant Protection Practice Guides, which covered such issues as occupational health and safety during the application of plant protection products, the protection of pollinators when applying PPPs, the principles on mixed and combined use of agrochemicals, and calibration of agricultural and orchard sprayers.

In order to make the most efficient use of the scientific achievements of Polish research institutes towards the implementation of the principles of integrated pest management, the tasks to this effect were formulated under five multi-annual programmes delivered for the needs of the Ministry of Agriculture and Rural Development, in particular under a programme delivered by the Institute of Plant Protection – National Research Institute, which fits into the scope of **Action 9**, aimed at using scientific research for integrated pest management and reducing the risk associated with the use of PPPs.

IV. Objectives and actions to reduce the risk associated with the use of plant protection products for 2018-2022

The main objectives of the National Action Plan are as follows:

- 1) dissemination of the general principles of IPM;
- 2) prevention of risks associated with the use of PPPs.

The monitoring of the degree to which the above objectives are being achieved will be based on the measure developed under the National Action Plan 2013-2017, namely the level of irregularities related to the use of PPPs. Over the course of delivery of the present National Action Plan, the value of the indicator should not exceed 1.5.

The indicator takes into account the results of the checks on the use of PPPs by agricultural producers carried out by the State Plant Health and Seed Inspection Service. Checks of agricultural holdings are conducted separately for three groups of crops (field, vegetable and orchard crops), and total 20 000 inspections per year. The checks comprise seven specific areas:

1. Documentation on the PPPs applied.
2. Use of a PPP not released for trade.
3. Use of a PPP contrary to its intended scope of application.
4. Conditions for safe use of the PPP.
5. PPP storage conditions.
6. Holding a valid certificate on completed training.
7. Testing of the working order of equipment for PPP treatments.

The index is based on the number of detected irregularities relative to the number of inspections carried out within the specific check areas. The check areas are assigned weights, taking into account the potential risks to people and the environment caused by the detected irregularities.

The indicator is based on the following formula:

$$W_{S.Kontrola} = \sum_j (W_j * N_j / Lk_j) * 100 [\%]$$

where:

- j - index for the specific check area (from 1 to 7),
- W_j - weight based on the significance of the irregularities detected in individual check areas for the safety of humans and the environment (W₁ = 0.05; W₂ = 0.3; W₃ = 0.2; W₄ = 0.2; W₅ = 0.1; W₆ = 0.05; W₇ = 0.1),
- N_j - total number of irregularities detected for check area 'j',
- Lk_j - number of inspections conducted in check area 'j'.

The objectives of the National Action Plan will be attained through the completion of the following actions.

1. Action 1. Training in the area of plant protection products

The operation, under the supervision of the State Plant Health and Seed Inspection Service, of a mandatory training scheme for persons who perform PPP treatments is a key contributor to reducing the risks associated with the application of PPPs for human health, food safety, and environmental protection, in particular with regard to the protection of non-target organisms (e.g. pollinating insects) and the aquatic environment. This Action works towards achieving the objectives laid down by Article 5 of Directive 2009/128/EC.

Pursuant to Article 41 of the Plant Protection Products Act of 8 March 2013, performing treatments with the use of PPPs intended for professional users is possible after the completion of specialist training.

Consequently, any treatments with plant protection products intended for professional users, including those carried out within urban green areas, in the railway sector, and in storage rooms, can only be performed by properly trained persons.

Also dealers of plant protection products must undergo specialist training. Pursuant to Article 25 of the Plant Protection Products Act of 8 March 2013, an entrepreneur conducting economic activity in the area of placing PPPs on the market should ensure that such dealers are appropriately trained and provide purchasers of PPPs at the latter's request with information on what risks are posed by the PPPs and how to use them correctly and safely. This follows from the fact that such persons have a direct impact on the behaviour of PPP users, and the knowledge they pass on should effectively contribute to mitigating the risks that arise during the transport, storage, and application of PPPs.

Furthermore, pursuant to Article 42 of the Plant Protection Products Act of 8 March 2013, mandatory training must also be completed by professional advisors providing plant protection guidance, which also includes their marketing activities.

Detailed requirements applicable to the organisation and curricula of the training are laid down by the Regulation of the Minister of Agriculture and Rural Development of 8 May 2013 on training in plant protection products (Journal of Laws, item 554). The training curricula cover general principles of integrated pest management and the ways of mitigating risks associated with the use of PPPs, including the risk to the aquatic environment. Importantly, the training curricula also focus on issues related to the protection of beneficial organisms, including pollinators. The training also addresses aspects related to proper storage of PPPs and handling PPP packaging. Separate curricula have been prepared for basic training and follow-up training, the latter being designated for those who have completed basic training. Training should be repeated every 5 years. The above constitutes the fulfilment of the requirement to establish a training system imposed on Poland by Directive 2009/128/EC.

The National Action Plan foresees further improvement and refinement of the quality of training, *inter alia* through the preparation of uniform training materials.

In addition, the training will address the following areas:

- 1) protection of pollinating insects during the application of PPPs;
- 2) protection of the aquatic environment during the application of PPPs;
- 3) elimination of risks associated with trade in counterfeit PPPs;
- 4) working order of pesticide application equipment and benefits produced by regular inspection of such equipment.

1.1. Action delivery method

Under the Action:

- 1) the following will be conducted:
 - a) compulsory training for various professional groups required to undergo training;
 - b) information activities among professional groups required to undergo training;
 - c) checks among professional groups required to undergo training;
- 2) uniform training materials will be prepared.

1.2. Measures used for monitoring

The effectiveness of the Action will be assessed on the basis of the level of irregularities regarding the fulfilment of the obligation to undergo training by persons who use PPPs. In 2022, the level of irregularities in this respect detected through planned checks carried out by the State Plant Health and Seed Inspection Service should be below 1%.

1.3. Entities responsible for implementation

The Action will be implemented by the Ministry of Agriculture and Rural Development subject to applicable limits of budget expenditures and by units reporting to or supervised by the Minister of Agriculture and Rural Development. In particular, it will be delivered by the Agricultural Advisory Centre and provincial agricultural

advisory centres, which will use the resources referred to in Article 11 of the Act of 22 October 2004 on agricultural advisory units (Journal of Laws of 2018, item 711), as well as by the Institute of Plant Protection – National Research Institute, and the Research Institute of Horticulture under multi-annual programmes implemented by these institutes (preparation of educational materials). Tasks related to the supervision of the system of PPP-related training will be fulfilled by the State Plant Health and Seed Inspection Service subject to the limits of budget expenditures of the Chief Plant Health and Seed Inspector, and by province governors. Cooperation in this respect is planned to be established with farmers' self-governing organisations, local governments, and agricultural universities and schools, as well as with agricultural organisations.

2. Action 2. Reducing the risks associated with the sale of plant protection products

In addition to the use of plant protection products, also trade in PPPs generates certain risks, which means that this area also needs to be addressed by the National Action Plan. This Action works towards achieving the objectives laid down by Article 6 of Directive 2009/128/EC.

In accordance with Article 25(1) of the Plant Protection Products Act of 8 March 2013, entities which deal with the placing of PPPs on the market and packaging them are required to be registered in the Register of Regulated Activities. This enables the State Plant Health and Seed Inspection Service to exercise effective supervision over these entities.

In addition, Article 31 of the above Act prohibits:

- 1) selling PPPs and offering PPPs for sale:
 - a) to a person whose behaviour indicates that he/she is in a state of inebriation, or to a minor;
 - b) in substitute packaging;
 - c) in a room where food or feed is sold, except for plant protection products intended for non-professional users kept sealed in a manner preventing them from coming into contact with the food or feed;
 - d) using a vending machine, self-service or sale outside of stationary points of sale (door-to-door sale and sale by itinerant tradesmen at marketplaces within the meaning of legislation on local taxes and charges);
 - e) past their expiry date;
- 2) providing information inconsistent with the requirements stated on the label of the plant protection product, including upon the sale of PPPs.

The Plant Protection Products Act of 8 March 2013 also requires distributors of plant protection products to comply with the above obligation for persons who sell plant protection products to final buyers to undergo relevant training (for advisors) (this requirement does not apply to microentrepreneurs who only sell low-risk preparations for non-professional users), as well as providing buyers of plant protection products with information on the risks they pose and on how to avoid them (Article 25 of the above Act). Persons who sell PPPs are often the main source of knowledge about the PPPs for people who perform treatments.

Thus, the legal framework adopted in Poland ensures full security of trade in plant protection products. In this respect, the objectives of Directive 2009/128/EC have been attained.

The actions aimed at reducing the risks associated with dealing in PPPs delivered under the National Action Plan will focus on eliminating the sale of PPPs to unauthorised persons and the distribution of counterfeit or unauthorised products. This task will be implemented through training and educational activities among distributors, farmers and other entities that use PPPs. Checks of compliance with the abovementioned requirements will also be performed.

2.1. Action delivery method

The Action will involve:

- 1) dissemination of information about risks associated with the use of unauthorised and counterfeit PPPs;
- 2) inspections of entities that carry out activities related to placing PPPs on the market.

2.2. Measures used for monitoring

The effectiveness of the Action will be assessed on the basis of irregularities related to trade in PPPs. In 2022, the level of irregularities in this respect, as detected through planned checks carried out by the State Plant Health and Seed Inspection Service, should be below 3%.

2.3. Entities responsible for implementation

The Action will be implemented by the Ministry of Agriculture and Rural Development subject to applicable limits of budget expenditures and by units reporting to or supervised by the Minister of Agriculture and Rural Development. In particular, it will be delivered by the Agricultural Advisory Centre and provincial agricultural advisory centres, which will use the resources referred to in Article 11 of the Act of 22 October 2004 on agricultural advisory units, as well as by the Institute of Plant Protection – National Research Institute, and the Research Institute of Horticulture under multi-annual programmes implemented by these institutes (preparation of educational materials and conduct of educational and information activities). Tasks related to the supervision of trade in and packaging of PPPs will be fulfilled by the State Plant Health and Seed Inspection Service subject to the limits of budget expenditures of the Chief Plant Health and Seed Inspector, and by province governors. Cooperation in this respect is planned to be established with farmers' self-governing organisations, local governments, and agricultural universities and schools, as well as with agricultural organisations.

3. Action 3. Raising awareness of plant protection products among the general public

Directive 2009/128/EC emphasises the need to raise awareness of plant protection products among the general public, including people not professionally involved in the use of PPPs, their role in modern agriculture and the risks that may be associated with their use.

Under this Action, which works towards achieving the objectives set out in Article 7 of Directive 2009/128/EC, the Ministry of Agriculture and Rural Development, the State Plant Health and Seed Inspection Service, the Agricultural Advisory Centre, working together with provincial agricultural advisory centres as well as institutes operating under the aegis of the Minister of Agriculture and Rural Development will conduct educational activities linked to PPPs. In particular, this will include dissemination of information on risks resulting from the use of plant protection products and methods for eliminating these risks. Information in this respect will be presented at conferences, as well as published in the press and online. Information materials will be distributed among users of plant protection products. Information on how to reduce risks associated with the use of PPPs for human and animal health and for the environment will also be made available via the website dedicated to integrated pest management, namely the Pest Monitoring Platform.

In addition, the following specific tasks will be delivered as part of the Action:

Task 1. Promoting good practices for safe use of PPPs

Safe use of plant protection products largely depends on the awareness, expertise and skills of the people who perform the treatments. By making the right choices and using the right equipment and technical infrastructure, persons who perform PPP treatments minimise the risks associated with using them.

The National Action Plan will comprise the preparation and updating of Good Plant Protection Practice Guides, which will cover such subjects as:

- 1) occupational health and safety during the storage and application of plant protection products;
- 2) protection of the aquatic environment during the application of PPPs;
- 3) protection of pollinating insects during the application of plant protection products;
- 4) calibration of PAE;
- 5) identification of counterfeit plant protection products.

All the information and publications dedicated to good practices will be available on the Pest Monitoring Platform.

Task 2. Gathering information on cases of human poisoning with PPPs

The requirement to introduce a system for registration of pesticide poisoning incidents follows from Article 7(2) of Directive 2009/128/EC, which provides that “Member States shall put in place systems for gathering information on pesticide acute poisoning incidents, as well as chronic poisoning developments where available, among groups that may be exposed regularly to pesticides such as operators, agricultural workers or persons living close to pesticide application areas”. When transposing the provisions of the Directive to Polish legislation through the Plant Protection Products Act of 8 March 2013, it was decided that information on human PPP poisoning incidents would be gathered by the office of the minister competent for agriculture.

The task will include continued cooperation between the Ministry of Agriculture and Rural Development and the Agricultural Social Insurance Fund, the Ministry of Health (the National Health Fund), and the National Labour Inspectorate as regards gathering information about cases of human poisoning with pesticides.

Apart from acquiring day-to-day knowledge about human PPP poisoning incidents and the related circumstances, the purpose of the tasks is also to assess the legal and organisational solutions adopted with the aim of counteracting such incidents.

3.1. Action delivery method

The Action will involve:

- 1) raising awareness of plant protection products among the public;
- 2) preparation of information and training materials regarding good practices related to application of PPPs;
- 3) information activities among users of plant protection products;
- 4) gathering and analysing information about PPP poisoning incidents involving humans.

3.2. Measures used for monitoring

The effectiveness of the Action will be assessed on the basis of irregularities in the application of PPPs. In 2022, the level of irregularities in this respect, as detected through planned checks carried out by the State Plant Health and Seed Inspection Service, should be below 5%.

3.3. Entities responsible for implementation

The Action will be implemented by the Ministry of Agriculture and Rural Development subject to applicable limits of budget expenditures and by units reporting to or supervised by the Minister of Agriculture and Rural Development. Cooperation in this respect is planned to be established with provincial agricultural advisory centres, farmers' self-governing organisations, local governments, and agricultural universities and schools, as well as agricultural organisations. Tasks related to the monitoring of human PPP poisoning incidents will be pursued in cooperation, *inter alia*, with the Agricultural Social Insurance Fund, the National Health Fund, and the National Labour Inspectorate.

4. Action 4. Ensuring the working order of PAE

Using a defective sprayer can have irreversible negative effects on both human and animal health, as well as on the environment. Uneven distribution of PPPs over the surface covered by spraying involves the risk of reduced efficiency of treatment over the areas where the amount of pesticides is lower than intended. This Action works towards achieving the objectives laid down by Article 8 of Directive 2009/128/EC.

In order to reduce the risk associated with the use of defective pesticide sprayers, and thus mitigate the risk of improper application of PPPs, a system for obligatory, regular testing of the working order of sprayers has been established.

Testing of the technical condition of sprayers is governed by the Plant Protection Products Act of 8 March 2013 and the Regulation of the Minister of Agriculture and Rural Development of 18 December 2013 laying down the technical requirements for pesticide application equipment (Journal of Laws 2016, item 760), as well as by the Regulation of the Minister of Agriculture and Rural Development of 13 December 2013

regarding the verification of the working order of pesticide application equipment (Journal of Laws of 2016, item 924).

The provisions of the above Act require that professional users of PPPs have the working order of their PAE inspected and have such equipment calibrated on a regular basis. Pursuant to these provisions, the following should be tested for working order: tractor sprayers and self-propelled field or orchard sprayers, aerial spraying equipment and equipment used in the railway industry, as well as non-standard equipment, i.e. seed treatment machines, spraying or fogging installations for the application of pesticides in greenhouses and plastic tunnels, self-propelled or tractor-mounted equipment for the application of PPPs in the form of granules and spraying pesticide application equipment other than hand-held and knapsack sprayers with the capacity of the tank above 30 litres.

Given that the technical requirements to be fulfilled by machinery for the application of plant protection products placed on the market or put into service (new sprayers) are laid down by Directive 2006/42/EC of the European Parliament and of the Council of 17 May 2006 on machinery, and amending Directive 95/16/EC (recast) (OJ L 157, 9.6.2006, p. 24, as amended), the requirements laid down by the above provisions apply exclusively to sprayers already in use. Their purpose is to verify whether the technical condition of sprayers has not deteriorated in a way that poses a risk to human health and the environment.

The legislation referred to above fully transposes the provisions of Article 8 of Directive 2009/128/EC and eliminates the risk associated with the application of plant protection products with equipment unfit for use.

As part of the Action, further improvement of the system for technical inspection of the technical condition of PAE is planned. To this end, guidelines for the testing and inspection of such equipment both for users and diagnosticians are intended to be issued.

In addition, information and educational activities will be delivered and inspections carried out to ensure that the working order of pesticide application equipment used by professional users is tested on a regular basis.

4.1. Action delivery method

Under the Action:

- 1) the following will be conducted:
 - a) mandatory testing of pesticide application equipment;
 - b) information and educational activities among users of plant protection products;
 - c) checks of entities that conduct PPP-related research and use plant protection products;
- 2) information and educational materials will be prepared.

4.2. Measures used for monitoring

The effectiveness of the Action will be assessed on the basis of the percentage of PAE in use that regularly undergoes mandatory testing for working order. In 2022, the level of irregularities in this respect, as detected through planned checks carried out by the State Plant Health and Seed Inspection Service, should be below 1%.

4.3. Entities responsible for implementation

The Action will be implemented by the Ministry of Agriculture and Rural Development subject to applicable limits of budget expenditures and by units reporting to or supervised by the Minister of Agriculture and Rural Development. Tasks related to the supervision of the testing of the working order of PAE will be fulfilled by the State Plant Health and Seed Inspection Service subject to the limits of budget expenditures of the Chief Plant Health and Seed Inspector, and by province governors. The training, educational and methodological materials will be developed by scientific and research units, including under multi-annual programmes. Cooperation in this respect is planned to be established with provincial agricultural advisory centres, farmers' self-governing organisations, local governments, and agricultural universities and schools, as well as agricultural organisations.

5. Action 5. Aerial spraying

Poland has adopted the necessary legal and organisational solutions to ensure that the risk associated with aerial pesticide spraying is minimised. This Action works towards achieving the objectives laid down by Article 9 of Directive 2009/128/EC. The requirements and obligations related to aerial pesticide spraying in Poland, applicable both to those who apply PPPs and to the inspection authorities, are laid down by the Plant Protection Products Act of 8 March 2013, and by the Regulation of the Minister of Agriculture and Rural Development of 18 April 2013 on the technical solutions to be used in aerial pesticide spraying (Journal of Laws, item 504), Regulation of the Minister of Agriculture and Rural Development of 22 May 2013 on the procedures to be followed when using and storing plant protection products (Journal of Laws, item 625), and Regulation of the Minister of Agriculture and Rural Development of 31 March 2014 laying down the conditions for the use of plant protection products (Journal of Laws, item 516).

The above provisions lay down specific rules applicable to aerial spraying of pesticides, including:

- 1) the plant protection products that cannot be applied by aerial spraying;
- 2) the rules on the approval of aerial treatments by the State Plant Health and Seed Inspection Service;
- 3) the methods for warning persons likely to come into accidental contact with sprayed PPPs about aerial treatments;
- 4) conditions under which such treatments can take place, *inter alia* in terms of atmospheric conditions;
- 5) requirements concerning the equipment mount on the aircraft (such as GPS devices for aligning the aircraft with the spraying path, and for starting and ending the spraying operation).

In Poland, aerial spraying is carried out exclusively over forests, which occupy 29.4% of the country's territory and overgrow an area of 9.1 million ha. Such treatments are mainly applied to control *Lymantria monacha*, *Dendrolimus pini*, *Panolis flammea*, *Acantholyda posticalis*, *Diptrion* sp., *Melolontha* sp., *Tortricidae*, and *Geometridae*.

Given that existing legal and organisational solutions have contributed to the elimination of identified risks associated with the performance of aerial pest control treatments, the Action will involve checking whether legislation currently in force is complied with.

5.1. Action delivery method

The Action will involve checks.

5.2. Measures used for monitoring

The effectiveness of this Action will be assessed on the basis of the number of irregularities in the performance of aerial pest control treatments. In 2022, the level of irregularities in this respect, as identified through checks carried out by the State Plant Health and Seed Inspection Service, should be below 1%.

5.3. Entities responsible for implementation

The Action will be implemented by the Ministry of Agriculture and Rural Development subject to applicable limits of budget expenditures and by units reporting to or supervised by the Minister of Agriculture and Rural Development. Tasks related to overseeing aerial spraying operations will be fulfilled by the State Plant Health and Seed Inspection Service subject to the limits of budget expenditures of the Chief Plant Health and Seed Inspector, and by province governors. Cooperation with the General Directorate of the State Forest Enterprise 'Lasy Państwowe' is planned in this area.

6. Action 6. Warning members of the public about plant protection treatments

In addition to spraying equipment operators and consumers of agricultural produce, also members of the public can be affected by pesticide spraying in the event they are accidentally exposed to contact with PPPs after entering spraying areas unaware of the risk.

Also farm animals, including honeybees, can be exposed to accidental contact with PPPs. As a consequence, legal solutions have been put in place to ensure that the public are warned against planned plant protection treatments. This Action works towards achieving the objectives laid down by Article 10 of Directive 2009/128/EC.

Specific solutions in this respect have been adopted in respect of aerial spraying since it is performed over vast forest areas. Meanwhile, persons not involved in forest protection do not associate forests with the use of PPPs. The above solutions are provided for by the Regulation of the Minister of Agriculture and Rural Development of 22 May 2013 on the procedures to be followed when using and storing plant protection products.

The Action will involve:

- 1) raising the awareness of the public, in particular beekeepers and organic farmers, of their rights related to requesting information about planned plant protection treatments;
- 2) conducting checks.

6.1. Action delivery method

The Action will involve:

- 1) raising the awareness of the public, in particular beekeepers and organic farmers, of their rights related to requesting information about planned plant protection treatments;
- 2) conducting checks.

6.2. Measures used for monitoring

The effectiveness of the measure will be assessed on the basis of the number of irregularities as regards the provision of information about planned plant protection treatments. In 2022, the level of irregularities in this respect, as identified through checks carried out by the State Plant Health and Seed Inspection Service, should be below 1%.

6.3. Entities responsible for implementation

The Action will be implemented by the Ministry of Agriculture and Rural Development subject to applicable limits of budget expenditures and by units reporting to or supervised by the Minister of Agriculture and Rural Development. The communication of information about planned protection treatments will be overseen by the State Plant Health and Seed Inspection Service subject to the limits of budget expenditures of the Chief Plant Health and Seed Inspector, and by province governors. Cooperation in this respect is planned to be established with provincial agricultural advisory centres, farmers' self-governing organisations, local governments, and agricultural universities and schools, as well as agricultural organisations.

7. Action 7. Measures to protect the aquatic environment and drinking water

Improperly applied plant protection products penetrate into natural reservoirs and watercourses, thus causing contamination of such environments. This poses risks to both aquatic organisms and humans, who use water resources in different ways (for consumption or recreation). Some PPPs can also accumulate in bottom sediments and be detected in water long after their use.

Consequently, given that this Action aims to achieve the objectives of Article 11 of Directive 2009/128/EC, regulations have been enacted to protect the aquatic environment against possible negative consequences of improper performance of PPP treatments. These issues are regulated by the Plant Protection Products Act of 8 March 2013, by the Regulation of the Minister of Agriculture and Rural Development of 22 May 2013 on the procedures to be followed when using and storing plant protection products, and by the Regulation of the Minister of Agriculture and Rural Development of 31 March 2014 laying down the conditions for the use of plant protection products. The above provisions lay down the conditions for the application of plant protection products (e.g. the maximum wind velocity at which treatments can be performed to avoid the risk of spray drift, the size of buffer zones around water reservoirs and along watercourses, and around impermeable surfaces that pose a risk of point contamination when PPPs are washed off), and specify the minimum distances from reservoirs and watercourses for performing operations that involve the greatest risk of contamination of the aquatic environment (such as PPP storage and filling and washing of PAE).

Issues related to the protection of the aquatic environment are also governed by the Water Law of 20 July 2017 (Journal of Laws, item 1566, as amended). Thus, the obligations following from the provisions of Directive 2009/128/EC have been fulfilled.

In addition to the foregoing, under the National Action Plan, educational and information activities will be carried out on the above legal regulations (in combination with Actions 1 and 3), and checks will be conducted to check compliance with laws concerning the protection of the aquatic environment.

Other activities will include ongoing monitoring of the condition of the aquatic environment for risks posed by PPPs. The results of the monitoring will form the basis for assessing the effectiveness of the legislation, as well as of the educational and surveillance activities undertaken to protect the aquatic environment.

The following tasks will be delivered under the Action.

Task 1. Monitoring of surface waters and groundwater and of bottom sediments

The State Environmental Monitoring is a system established under the Environmental Law of 27 April 2001 (Journal of Laws of 2018, item 799, as amended). Under Article 25(2) of the Law, the State Environmental Monitoring is a system for measuring, assessing and forecasting the condition of the environment and for collecting, processing and disseminating environmental information. The information gathered is used to support environmental activities by regularly informing the public administration and the public about:

- 1) the quality of elements of nature, compliance with applicable environmental quality standards or other levels as defined by law, and areas where such standards or other requirements are not conformed to;
- 2) changes in the quality of elements of nature, the underlying reasons, including the causal relationships between emissions and the condition of the elements of nature.

In accordance with the Act of 20 July 1991 on the Environmental Inspectorate (Journal of Laws of 2016, item 1688, as amended) the Environmental Inspectorate is in charge of the State Environmental Monitoring.

The system is used for monitoring surface waters and groundwater. The rules on how the monitoring is to be conducted are laid down by the Regulation of the Minister of the Environment of 19 July 2016 on the forms and methods of the monitoring of bodies of surface waters and groundwater (Journal of Laws, item 1178). The detailed rules on assessing the condition of groundwater are laid down in the Regulation of the Minister of the Environment of 21 December 2015 on the criteria and method for assessing the condition of groundwater bodies (Journal of Laws of 2016, item 85), while specific provisions on assessing the condition of surface waters are laid down in the Regulation of the Minister of the Environment of 21 July 2016 on the method for classifying the condition of surface water bodies and on environmental quality standards for priority substances (Journal of Laws, item 1187).

The monitoring of water quality complies with the requirements set out by Directive 2000/60/EC of the European Parliament and of the Council of 23 October 2000 establishing a framework for Community action in the field of water policy (OJ L 327, 22.12.2000, p. 1, as amended - OJ special Polish edition, chapter 15, vol. 5, p. 275), also known as the Water Framework Directive, while the requirements on groundwater monitoring are set out by Directive 2006/118/EC of the European Parliament and of the Council of 12 December 2006 on the protection of groundwater against pollution and deterioration (OJ L 372, 27.12.2006, p. 19, as amended).

Monitoring of surface waters and groundwater is carried out through:

- 1) diagnostic monitoring;
 - 2) operational monitoring;
 - 3) investigative monitoring;
 - 4) monitoring of protected areas, which is complementary to the monitoring of the condition of bodies of surface waters (diagnostic monitoring, operational monitoring)
- in line with the requirements of Regulation of the Minister of the Environment of 19 July 2016 on the forms and methods of the monitoring of bodies of surface waters and groundwater and on its modification.

The individual types of surface water monitoring involve analyses of biological, physicochemical and chemical indicators, which are performed by provincial environmental inspectorates, and of

hydromorphological indicators, which are carried out by the hydrological and meteorological service. Groundwater monitoring involves the determination of the chemical and quantitative condition of bodies of groundwater.

Analyses of riverbed and lakebed sediments are carried out as part of surface water monitoring. The delivery of the plan of monitoring tests is overseen directly by the Main Inspector for Environmental Protection.

The State Environmental Monitoring includes analyses for priority substances, which include substances or groups of substances which have been present in plant protection products or have been used for their production.

Subtask 1. Surface waters

As part of the diagnostic, operational and investigative monitoring, as well as monitoring of protected areas of river and lake, transitional and coastal water bodies, the Environmental Inspectorate will carry out the analyses specified in the State Environmental Monitoring plans. The biological elements that are crucial for assessing the ecological condition, i.e. key elements determining the ecological condition of bodies of water, will continue to be analysed. As part of chemical monitoring, testing will be carried out for substances that are particularly harmful to the aquatic environment (priority substances, including substances that are included in plant protection products and are used to produce them).

Subtask 2. Groundwater

The monitoring of groundwater quality will include analyses of the content of organic compounds, including pesticides. To date, analytical work has included the determination of compounds from the group of organochlorine pesticides and organophosphorus pesticides as well as triazine pesticides. In the years to follow, extending the scope of the pesticides tested for is envisaged.

Subtask 3. Bottom sediments

Monitoring of riverbed and lakebed sediments will be conducted at representative measurement points used for the monitoring of surface water bodies. Monitoring of bottom sediments will be carried out in accordance with the requirements of Directives 2000/60/EC and 2013/39/EU, and will involve, *inter alia*, multi-annual analyses of the trends of changes in the concentrations of bottom sediment substances.

Task 2. Conducting monitoring of water intended for human consumption

The supervision over the quality of water intended for human consumption is exercised by the State Sanitary Inspectorate pursuant to the State Sanitary Inspectorate Act of 14 March 1985 (Journal of Laws of 2017, item 1261, as amended) and the Act of 7 June 2001 on collective water supply and sewage water collecting (Journal of Laws of 2018, item 1152).

Pursuant to Article 5 of the Act of 7 June 2001 on collective water supply and discharge of wastewater, water and sewage companies are required to ensure, *inter alia*, appropriate quality of supplied water and regular internal control within the framework of the supply of water to the public. In addition, the Regulation of the Minister of Health of 7 December 2017 on the quality of water intended for human consumption (Journal of Laws, item 2294) requires that appropriate water quality be ensured through internal control by entities supplying or using water sourced from an individual extraction point for the needs of business operation or in public buildings, collective accommodation buildings, or in the premises of food market operators, which use water. The rules of the monitoring applied to exercise ongoing supervision over the quality of water intended for human consumption by regular testing of water and providing information necessary for its assessment are set out by the Regulation of the Minister of Health of 7 December 2017 on the quality of water intended for human consumption. Analyses of the quality of water for consumption are carried out by the State Sanitary Inspectorate or other laboratories having a documented system certifying the quality of their analyses, approved by bodies of the State Sanitary Inspectorate, pursuant to the Act of 7 June 2001 on collective water supply and discharge of wastewater.

Analyses of water quality, *inter alia*, for the presence and total content of pesticides are carried out within the framework of the water quality monitoring programme, which includes the results of water quality analyses obtained through internal water quality control performed by water and sewage companies and by entities

supplying or using water sourced from an individual extraction point for the needs of business operation or in public buildings, collective accommodation buildings, or in the premises of food market operators, which use water, as well as through supervision over water quality exercised by the State Sanitary Inspectorate. The monitoring is used to provide information necessary to assess compliance with the requirements set out in the Regulation of the Minister of Health of 7 December 2017 on the quality of water intended for human consumption in terms of health risks likely to be caused by contaminants present in water. Samples for water quality analyses are collected according to the schedule for the respective year at a specific frequency. The minimum frequency of sampling for the needs of water quality analyses depends on the volume of water supplied or produced within the respective supply zone.

Pursuant to Annex 1 to the Regulation of the Minister of Health of 7 December 2017 on the quality of water intended for human consumption, bodies of the State Sanitary Inspectorate and companies supplying water for human consumption to the general public perform tests for the presence and total content of pesticides in water intended for human consumption insofar as pesticides are likely to be present within the respective area. The presence of the pesticides that can be expected to be present in the water is determined. The scope of analyses conducted to test the quality of water intended for human consumption is determined by the competent state district or state border sanitary inspector based on a range of factors such as the quality and type of water drawn, the water treatment methods used, materials used to build the water supply network and contaminants present in the environment.

Task 3. Analyses of the impact of chemical plant protection on the state of surface waters

The state monitoring of surface waters and groundwater, as well as of bottom sediments focuses on collecting data about the state of surface water bodies to produce multi-faceted and comprehensive assessments, *inter alia* for the purpose of fulfilling the objective of water management plans. Owing to the limited spectrum of substances included in the testing, which results from legal considerations, such monitoring does not include testing for the presence of PPPs applied.

For this reason, such monitoring should be supplemented to cover the largest possible number of active substances occurring currently in plant protection products.

For this purpose, the Institute of Plant Protection – National Research Institute and the Research Institute of Horticulture, working together with provincial environmental inspectorates, will conduct plant protection product residue monitoring in surface waters under multi-annual programmes on the basis of agreements or arrangements between the above institutes and provincial environmental inspectorates.

Task 4. Supervision over plant protection products containing active substances that should be subject to specific monitoring

Pursuant to Article 1 of Commission Implementing Regulation (EU) No 540/2011 of 25 May 2011 implementing Regulation (EC) No 1107/2009 of the European Parliament and of the Council as regards the list of approved active substances (OJ L 153, 11.6.2011, p. 1, as amended), the active substances set out in the Annex to the Regulation are approved for use in plant protection products. The Annex to the Regulation also presents specific requirements applicable to the respective active substances and information on whether an active substance should be covered by a specific monitoring programme due to an increased risk associated with the use of PPPs.

Under the National Action Plan, supervision will be exercised over the use of plant protection products containing active substances that should be subject to a specific monitoring programme.

7.1. Action delivery method

Under the Action:

- 1) educational and information activities will be conducted;
- 2) checks will be carried out;
- 3) monitoring of surface waters and groundwater and of bottom sediments will be conducted;
- 4) monitoring of water intended for human consumption will be carried out;
- 5) supervision over plant protection products containing active substances that should be subject to specific monitoring will be exercised.

7.2. Measures used for monitoring

The effectiveness of the Action will be assessed on the basis of the results of water quality testing. In 2022, the quality of water as determined through the monitoring of the impact of chemical plant protection on the condition of surface waters, as conducted by the Institute of Plant Protection – National Research Institute and Research Institute of Horticulture in cooperation with provincial environmental inspectorates, should classify more than 95% of the samples as A1 category, according to the standard established by the Regulation of the Minister of the Environment of 27 November 2002 laying down the requirements to be met by surface waters used for supplying water for human consumption.

7.3. Entities responsible for implementation

The Action will be implemented by the Ministry of Agriculture and Rural Development, Ministry of Health, Ministry of the Environment and by units reporting to or supervised by the Minister of Agriculture and Rural Development, the Minister of Health, or the Minister of the Environment subject to applicable limits of budget expenditures of the individual units of the public finance sector involved in the implementation of the Action. Tasks related to overseeing compliance with applicable aquatic environment protection measures when performing plant protection treatments will be implemented by the Inspectorates subject to the limits of budget expenditures of their Main Inspectors, and by province governors. Cooperation in this respect is planned to be established with provincial agricultural advisory centres, farmers' self-governing organisations, local governments, and agricultural universities and schools, as well as agricultural organisations.

8. Action 8. Limiting the use of plant protection products in particularly sensitive areas

Poland has adopted specific laws limiting the use of plant protection products in particularly sensitive areas, especially in areas where people particularly vulnerable to the risks posed by PPPs (children, the elderly, sick people) are likely to be present. This Action works towards achieving the objectives laid down by Article 12 of Directive 2009/128/EC.

Pursuant to Article 36(1) of the Plant Protection Products Act of 8 March 2013, the use of plant protection products which are classified, pursuant to Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 (OJ L 353, 31.12.2008, p. 1, as amended), as posing a risk to human health is prohibited within the area of playgrounds, nurseries, kindergartens, primary schools, hospitals, "A" Protection Zones delimited within health resorts, or in health-resort protection areas within the meaning of the laws on spa treatment, health resorts, and health-resort protection areas, as well as in municipalities having the status of a health-resort. Derogations from this principle may only be applied in specific cases:

- 1) presence of quarantine pests;
- 2) risks posed by pests to Historic Tree Monuments or Natural and Landscape Sites within the meaning of nature protection laws;
- 3) presence of plants posing a risk to human health;
- 4) presence of organisms harmful to plants or plant products the control of which by non-chemical means is not economically viable or is ineffective.

Derogations are granted by Provincial Plant Health and Seed Inspectors.

Furthermore, pursuant to Article 35(1) of the above Act, plant protection products should be applied in such a way as not to pose a risk to human health, animals, and the environment, which includes preventing PPPs from being drifted to areas or objects that are not targeted by the PPP treatments, and to plan the application of PPPs with due account taken of the times when people will be present within the area where treatments are to be performed.

Thus, Poland has adopted all the necessary legal measures to limit the use of plant protection products in particularly sensitive areas and to eliminate the associated risks in respect of particularly vulnerable groups of the population.

The Action will involve educational activities and checking that the above laws are complied with.

8.1. Action delivery method

The Action will involve:

- 1) information and educational activities;
- 2) checks.

8.2. Measures used for monitoring

The effectiveness of the Action will be assessed on the basis of the level of irregularities in the application of PPPs within particularly sensitive areas. In 2022, the level of irregularities in this respect, as identified through checks carried out by the State Plant Health and Seed Inspection Service, should be below 1%.

8.3. Entities responsible for implementation

The Action will be implemented by the Ministry of Agriculture and Rural Development subject to applicable limits of budget expenditures and by units reporting to or supervised by the Minister of Agriculture and Rural Development. Checks for compliance with laws limiting the application of plant protection products in particularly sensitive areas will be carried out by the State Plant Health and Seed Inspection Service subject to the limits of budget expenditures of the Chief Plant Health and Seed Inspector, and by province governors. Cooperation in this respect is planned to be established with provincial agricultural advisory centres, farmers' self-governing organisations, local governments, and agricultural universities and schools, as well as agricultural organisations.

9. Action 9. Eliminating risks at individual stages of plant protection treatments

Risks associated with the use of plant protection products may occur not only during their application, but also at other stages of the preparation and performance of the treatment. In particular, safety can be ensured by proper storage of plant protection products (in order to prevent them from penetrating into waters or soil in the event of accidental spillage or scattering, accidental contact with unauthorised persons or with animals – a particularly serious risk is posed by ingestion, which may happen when PPPs are stored in food packaging), proper preparation of the spray liquid (there is a high risk of spillage and spot contamination), as well as proper handling of the remnants of spray liquid and cleaning of the spraying equipment after the treatment has been completed. This Action works towards achieving the objectives laid down by Article 13 of Directive 2009/128/EC.

Because, in general, non-professional users of plant protection products are not able to comply with the requirements of proper storage of plant protection products, cleaning of the equipment they use or handling pesticide remnants left after the treatment (amateur users are likely to store plant protection products in their residential premises), such persons should not have free access to particularly dangerous PPPs.

In light of the above, Poland has adopted legislation laying down specific methods for performing the individual plant protection activities, including methods for:

- 1) storing plant protection products (including occupational health and safety requirements and requirements to be met by storage facilities);
- 2) preparing the spray liquid (the minimum distance from reservoirs and watercourses at which such activities can be performed);
- 3) applying plant protection products (including requirements regarding the maintenance of buffer zones, weather conditions under which treatments may be performed);
- 4) cleaning PAE (the minimum distance from water reservoirs and watercourses at which such operations can be performed);
- 5) handling remnants of the spray liquid after treatments;
- 6) handling empty PPP packaging.

The handling methods aimed at eliminating risks associated with each of the above activities are set forth by the Regulation of the Minister of Agriculture and Rural Development of 24 June 2002 laying down occupational health and safety rules to be followed when applying and storing plant protection products and organic and organo-mineral fertilisers (Journal of Laws, item 896, as amended), Regulation of the Minister of Agriculture and Rural Development of 22 May 2013 on the procedures to be followed when using and storing

plant protection products, Act of 13 June 2013 on packaging and packaging waste management (Journal of Laws of 2018, item 150, as amended), and Regulation of the Minister of Agriculture and Rural Development of 31 March 2014 laying down the conditions for the use of plant protection products.

Furthermore, solutions have been put in place to limit access of non-professional users to preparations posing the greatest risk since most such users do not have detailed knowledge about how to apply PPPs safely, and use pesticides in places where ensuring safe conditions of their application is difficult (in living quarters, on balconies, and in kitchen gardens).

Pursuant to Article 36(4) of the Plant Protection Products Act of 8 March 2013, non-professional users are banned from the application through spraying or fumigation, as well as from using for seed treatments, of plant protection products classified, pursuant to Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006, into at least one of the following risk classes and categories:

- 1) acute toxicity, categories 1, 2 and 3;
- 2) carcinogenicity;
- 3) mutagenicity;
- 4) reproductive toxicity;
- 5) specific target organ toxicity after single exposure (STOT SE) category 1;
- 6) specific target organ toxicity after repeated exposure (STOT RE) category 1.

Eliminating risks at the various stages of plant protection treatments also involves caring that PPPs are applied in a way not causing any threats to human and animal health or the environment (in addition to the spraying operation itself, the promotion of good practices must also address other uses of plant protection products, such as seed treatment) and preventing plant protection products from being drifted into non-targeted areas or objects. A heavy emphasis should be placed on the protection of pollinating insects.

This Action will involve educational activities and checking that the above laws are complied with.

9.1. Action delivery method

The Action will involve:

- 1) information and educational activities;
- 2) checks.

9.2. Measures used for monitoring

The effectiveness of the Action will be assessed on the basis of the number of irregularities in the performance of plant protection treatments. In 2022, the level of irregularities regarding the conditions for safe application and storage of plant protection products identified through checks carried out by the State Plant Health and Seed Inspection Service should be below 1%.

9.3. Entities responsible for implementation

The Action will be implemented by the Ministry of Agriculture and Rural Development subject to applicable limits of budget expenditures and by units reporting to or supervised by the Minister of Agriculture and Rural Development. Tasks related to overseeing the performance of plant protection treatments will be fulfilled by the State Plant Health and Seed Inspection Service subject to the limits of budget expenditures of the Chief Plant Health and Seed Inspector, and by province governors. The information and educational materials will be prepared by institutes reporting to the Minister of Agriculture and Rural Development, including within the framework of their multi-annual programmes.

10. Action 10. Integrated pest management

Promoting the principles of integrated pest management is a key objective of the National Action Plan. This Action works towards achieving the objectives laid down by Article 14 of Directive 2009/128/EC.

The implementation of the principles of integrated pest management, the key assumption of which is to use PPPs in a rational way, based on the actual need for treatment, and considering non-chemical methods first, reduces the risks associated with the use of PPPs in the most effective way.

This task is a continuation of the activities pursued under the National Action Plan for 2013-2017, thanks to which the principles of integrated pest management were popularised, especially among professional users of PPPs, thus mitigating the risks associated with the use of PPPs.

The principles of integrated pest management will be propagated through the following specific tasks.

Task 1. Dissemination of knowledge in the field of integrated pest management

Further popularisation of knowledge about integrated pest management will be a priority task of the National Action Plan.

This task will be delivered through:

- 1) specialist training, seminars and conferences, demonstrations of best practices and field trials and other projects in the area of plant protection;
- 2) preparation and dissemination of the results of research, information and training materials, as well as publication of plant protection-related information in professional magazines;
- 3) running and developing the Pest Monitoring Platform, via which integrated pest management methodologies, decision support schemes, pest management programmes, and scientific papers concerning plant protection will be made available.

Educating agricultural producers and advisors in a suitable way, as well as providing them with the necessary tools to disseminate the principles of integrated pest management, will be the key way of promoting the concept of integrated pest management, and thus raising the awareness of sustainable crop protection methods. The development of this electronic form of information sharing will provide a platform and tool for exchange of experience and putting scientific knowledge into practice when implementing the principles of integrated pest management.

Task 2. Maintaining an Internet platform dedicated to integrated pest management

The Pest Monitoring Platform (www.agrofagi.com.pl), which was created under the National Action Plan for 2013-2017, is a forum and tool for exchange of experience and transferring scientific knowledge into practice with a view to implementing the requirements of integrated pest management. The platform is run by the Institute of Plant Protection – National Research Institute in close cooperation with the Research Institute of Horticulture and the Institute of Soil Science and Plant Cultivation – National Research Institute in Puławy.

Given the level of Internet access in Poland, especially its development in rural areas, the platform enables rural residents to take advantage of modern technologies. The Internet platform dedicated to integrated pest management is also a useful source of information for the general public about plant protection products and their application. The website will be used for providing information on pest monitoring, decision support systems in pest management, information on pest control, as well as on integrated pest management methodologies, pest management programmes, and guides.

Under the Action, the Pest Monitoring Platform is planned to be expanded and modernised so that it responds to ongoing users' needs, which will include, in particular:

- 1) regular publication, in the form of a pamphlet, of information relevant in the context of integrated pest management (results of scientific research, field observations, amendments to legislation, identified threats);
- 2) issuing announcements with results of the monitoring and warnings about sudden hazards to crops;
- 3) ensuring interactivity for the Platform by giving it an 'ask the expert' feature.

Information about rational fertilisation in integrated pest management will be added to the Platform resources. The Platform will be enriched with information containing fertilising advice based on soil and plant material testing performed by Chemical and Agricultural Research Laboratories.

In addition, cooperation with other institutions in the area of pest monitoring will be furthered in order to obtain as much data as possible (in particular with provincial agricultural advisory centres, the Research Centre for Cultivar Testing, and scientific and research units).

Task 3. Preparation, updating and dissemination of integrated pest management methodologies for individual crops

The non-legislative activities aimed at putting the general principles of integrated pest management in place will include the updating and providing professional users of plant protection products with integrated pest management methodologies. The methodologies include recommendations on plant protection methods for individual crops, including agrotechnical, biological and chemical ones, while placing a heavy emphasis on supporting natural self-regulation processes in agrocenoses. Appropriate crop rotation is one of the elements used in integrated pest management. Other actions include cultivation of resistant and tolerant varieties and using alternative forms of farming in agricultural practice, such as sowing mixtures of varieties and species, thanks to which the resources of the agricultural environment can be utilised in a better way, without disturbing its biological balance.

Integrated pest management methodologies include guidance on how to select and apply plant protection products to minimise risks to human health and the natural environment, including the aquatic environment and pollinating insects. The methodologies have the status of voluntary guidelines.

As part of this task, previously introduced methodologies will be updated (to take into account technological progress in plant protection, results of new research, and identified hazards), and methodologies for new species will be developed, too. Newly prepared and updated methodologies will be made available via the Pest Monitoring Platform.

Task 4. Running a pest monitoring system

As an essential element, integrated pest management should involve limiting chemical plant protection treatments to cases where it is justified by the occurrence of harmful organisms at levels that pose a risk to crops, as well as selecting optimal timing for performing plant protection treatments. By increasing the effectiveness of plant protection treatments, this reduces the amount of plant protection products applied and allows the most effective preparations to be used.

The tasks in this area will be performed by research institutes and advisory units – both agricultural advisory units and commercial institutions or organisations active in the field of agriculture, as well as by producer groups.

The delivery of this task will be mainly ensured by the Pest Monitoring Platform, which will include announcements and recommendations regarding the performance of treatments in connection with the occurrence of a risk caused by harmful organisms.

In addition, as part of the task, signalling guides for individual crops will be prepared and made available to producers and advisors, providing practical guidance on how to identify and signal various pests. The guides, made available via the Pest Monitoring Platform, will take the form of comprehensive compendia for specific crops as well as summary information cards for individual pests.

Task 5. Providing decision support systems in pest management

The use of advanced decision support systems in pest management is a vital element of monitoring crops for the occurrence of harmful organisms and signalling their presence. Such systems can help limit the number of treatments while ensuring effective protection of crops, which is conducive to increasing the safety of consumers of agricultural products and of the natural environment, as well as to reducing production costs.

Thus, in addition to the pest monitoring system, the propagation of the principles of integrated pest management will be aided by providing professional users of plant protection products with access to selected decision support systems in pest management.

As part of multi-annual programmes pursued by institutes supervised by the Minister of Agriculture and Rural Development, new schemes will be developed and tested and existing ones will be updated. All of them

will be made available via the Pest Monitoring Platform.

Task 6. Providing integrated pest management programmes

Integrated pest management programmes prepared for individual crops are among the tools necessary for proper planning and performance of plant protection treatments. Such programmes also supplement the knowledge provided through integrated pest management methodologies since they contain information on currently available PPPs.

In order to help put the principles of integrated pest management in place, in addition to information on chemical plant protection methods, pest management programmes must contain guidance on precautionary and preventive measures against the occurrence of pests, as well as information on non-chemical methods of pest eradication. Such programmes also indicate preparations containing low-risk active substances, biological preparations, and basic substances that should be given priority over the use of chemical PPPs.

Pest management programmes will also take into account the specific requirements of the food quality schemes that are oriented to reducing risks to the natural environment and human health, i.e. organic farming and integrated crop production schemes.

Pest management programmes will also include information on the risks associated with the use of individual preparations and recommendations on how to eliminate them. In particular, this applies to the protection of waters, beneficial fauna, and pollinating insects. They will also contain other information necessary for proper planning of plant protection treatments, such as guidance on combined application of agrochemicals or prevention of resistance in harmful organisms or minimisation of the presence of active substance residues.

As part of the National Action Plan, pest management programmes consistent with the above conditions will be prepared for individual crops and updated on a regular basis. The programmes will be disseminated via the Pest Monitoring Platform.

Task 7. Dissemination of the results of the assessment carried out within the framework of Post-Registration Variety Testing

The use of plant protection products can be limited, *inter alia*, by the use of cultivars showing resistance or tolerance to harmful organisms.

This task will be carried out by the Research Centre for Cultivar Testing, using analyses of the resistance of cultivars to pests carried out within the framework of Post Registration Variety Testing, based on which lists of varieties recommended for growing within the respective provinces will be compiled. The lists will be made available via the Pest Monitoring Platform as part of agricultural advice.

Task 8. Promotion of the Integrated Plant Production Scheme

Integrated Plant Production is a nationwide food quality scheme that makes sustainable use of technical and biological progress in plant cultivation, protection and fertilisation, the overarching objective of which is to care for human health and the environment. Pursuant to the Plant Protection Products Act of 8 March 2013, the monitoring of agricultural holdings participating in the scheme and the issuing of certificates of compliance with the Act is entrusted to supervisory bodies authorised by Regional Plant Health and Seed Inspectors.

Thanks to participating in the scheme, agricultural producers are capable of producing high quality crops that can be placed on the market with an 'Integrated Plant Production' sign.

As part of this task, information and dissemination activities will be carried out to promote the scheme. The range of crops that make producers eligible for participation in the scheme will be expanded (through the preparation of new integrated crop production methodologies). In addition, the methods for monitoring the scheme to ensure its credibility will be improved, both on the domestic market and on the markets of the countries to which Polish agricultural produce will be exported.

Task 9. Providing advice in plant protection

The task of the Agricultural Advisory Centre in Brwinów and provincial agricultural advisory centres is to provide agricultural advice. As regards their responsibilities related to providing advice to farmers, provincial agricultural advisory centres train farmers and other rural residents, mainly in the use of modern agrotechnical methods and organic farming. In addition, provincial agricultural advisory centres carry out information activities supporting the development of agricultural production, activities in the field of raising professional qualifications of farmers and other rural residents, and popularise agricultural production methods. These tasks also include the dissemination of knowledge and providing users of plant protection products with the latest information related to pest control. Proper behaviour of agricultural producers using PPPs reduces the risks associated with their use to the greatest extent. Therefore, professional and independent consultancy in this area needs to be provided.

The Agricultural Advisory Centre in Brwinów and provincial agricultural advisory centres cooperate with central and local government institutions dealing, *inter alia*, with pest control, in particular with research institutes, agricultural universities, the State Plant Health and Seed Inspection Service, and agricultural boards, farmers' organisations, and other economic operators that supply agricultural inputs.

The Agricultural Advisory Centre in Brwinów and provincial agricultural advisory centres are the core units that deal with continuing education of farmers and rural residents. The qualifications of advisory staff of provincial centres are improved through a system of specialised training and organisation of seminars, conferences and demonstrations of best agricultural practices, which represents a key component ensuring that high-quality advice services are provided.

Task 10. Ensuring safety of pollinating insects during plant protection treatments

One of the essential objectives of integrated pest management is to reduce the impact of plant protection treatments on non-target organisms, in particular beneficial fauna, including pollinating insects.

Pollinators, in particular honeybees, play an extremely important role in agriculture, as well as in natural ecosystems. According to data of the Food and Agriculture Organization of the United Nations (FAO), out of the 100 main crop species, which account for 90% of the food produced in the world, as many as 71 are pollinated by bees. These insects play a particularly important role for the production of fruit (apples, cherries), vegetables (cucumbers, pumpkins, zucchini) and industrial plants (rapeseed).

At the same time, apart from viral and parasitic diseases and environmental changes, plant protection products are considered to be one of the causes of the mortality of pollinating insects.

This follows from the fact that plant protection products, if applied improperly, can cause acute poisoning of bees, causing their sudden mortality, as well as chronic poisoning, which weakens the insects' organism and increases their exposure to other harmful factors.

In light of the foregoing, solutions have been put in place to mitigate risks created by PPPs for pollinating insects. Issues related to the protection of pollinators are among the requirements of integrated pest management, as defined by the Regulation of the Minister of Agriculture and Rural Development of 18 April 2013 on the requirements of integrated pest management (Journal of Laws, item 505), and are covered by mandatory training for persons who apply pesticides, the programmes of which are set out by the Regulation of the Minister of Agriculture and Rural Development of 8 May 2013 on training in plant protection products. The Regulation of the Minister of Agriculture and Rural Development of 31 March 2014 laying down the conditions for the use of plant protection products also specifies the minimum distances from apiaries at which pesticides may be applied.

The task will involve activities aimed at reducing the number of cases of bee poisoning from pesticides, including:

- 1) information and educational activities among pesticide users;
- 2) monitoring activities to determine the health condition of bee colonies in Poland;
- 3) checking whether PPPs are applied properly;
- 4) scientific research on the vulnerability of honeybees and other pollinators to plant protection products.

In addition, in order to ensure that the risks posed by plant protection products for bees are assessed properly, the Plant Protection Products Act of 8 March 2013 requires that the office supporting the minister competent for agriculture collect information on cases of bee poisoning with PPPs.

The system for collecting bee poisoning information provides a full picture of the scale of the phenomenon and, if necessary, can be used for taking additional actions to mitigate it.

Under the National Action Plan, existing activities aimed at measuring the scale of risks posed by plant protection products to bees will be continued.

Task 11. Monitoring and limiting resistance of pests to plant protection products

Reducing the use of chemical plant protection products to the minimum is one of the key principles underlying integrated pest management. Nowadays, the resistance of pests to plant protection products is a very common cause behind the ineffectiveness of chemical treatments. The phenomenon leads to ever higher intensity of chemical treatments, which is contrary to the assumptions of integrated pest management. As a result, much more chemical substances get into the natural environment. Other impacts include high economic losses in agriculture resulting from the immunisation of pests (decreased crop yields, higher costs associated with more frequent chemical treatments).

Pest resistance is a dynamic phenomenon, one that undergoes various changes and therefore requires constant monitoring. Currently, this phenomenon is widespread in Poland, prevailing among such PPPs as insecticides, fungicides, herbicides, and other groups of chemical and biological PPPs. Examples of most economically-relevant pest species whose resistance to chemical agents causes high losses in agriculture include *Meligethes aeneus*, *Ceutorhynchus assimilis*, *Myzus persicae* in rapeseed, *Cercospora beticola*, and *Apera spica-venti*.

In response to changes in resistance of pest species with economic implications, suitable anti-immunisation strategies will be developed and introduced into the agricultural practice. Such strategies can also be prepared and considered for the purpose of maintaining the effectiveness of active substances with particular relevance for agriculture. Furthermore, on-going, innovation-based recommendations and information on the level of resilience of pests will be formulated and communicated to agricultural practitioners so as to allow crop producers to protect their crops and the environment in a more effective way.

Not only will the delivery of the task contribute to solving on-going problems related to the resistance of pests and the effectiveness of plant protection products, but it will also be helpful in keeping the phenomenon under control, responding to new problems in a fast way (often during the period when a PPP is authorised, but resistance occurs and rises), and increasing the number of effective PPPs.

Furthermore, resistance mechanisms will be researched to develop, where possible, methods for restoring sufficient level of susceptibility to the respective active substance in resistant populations (e.g. by using appropriate synergists blocking resistance mechanisms).

Within the framework of the task:

- 1) monitoring will be carried out to determine the level of resistance or susceptibility of selected pest species to plant protection products;
- 2) research will be conducted to identify resistance mechanisms;
- 3) a strategy for reducing the risk of resistance and minimising its effects will be prepared;
- 4) recommendations for agricultural producers and advisers will be prepared on an ongoing basis taking into account the most recent developments related to the resistance of pests;
- 5) information and educational activities among users of plant protection products will be conducted.

10.1. Action delivery method

Under the Action:

- 1) knowledge on integrated pest management will be disseminated;
- 2) an Internet platform dedicated to integrated pest management will be maintained and developed;
- 3) integrated pest management methodologies for individual crops will be developed, updated and made

- available;
- 4) a pest monitoring system will be maintained;
 - 5) decision support systems in pest management will be made available;
 - 6) integrated pest management programmes will be provided;
 - 7) the results of the assessment carried out within the framework of Post-Registration Variety Testing will be disseminated;
 - 8) the Integrated Plant Production Scheme will be promoted;
 - 9) plant protection advice will be provided;
 - 10) information and educational activities will be pursued and checks carried out to reduce the risk posed by PPPs for pollinating insects;
 - 11) cases of bee poisoning from pesticides will be monitored;
 - 12) the level of susceptibility of pests to plant protection products will be monitored, based on which strategies to limit resistance will be prepared and disseminated.

10.2. Measures used for monitoring

The effectiveness of the Action will be assessed on the basis of the number of irregularities as regards compliance with the principles of integrated pest management. In 2022, the level of irregularities in this respect, as detected through planned checks carried out by the State Plant Health and Seed Inspection Service, should be below 5%.

10.3. Entities responsible for implementation

The Action will be implemented by the Ministry of Agriculture and Rural Development subject to applicable limits of budget expenditures and by units reporting to or supervised by the Minister of Agriculture and Rural Development, as well as by the Agricultural Advisory Centre in Brwinów and provincial agricultural advisory centres, which are financed with the funding referred to in Article 11 of 22 October 2004 on agricultural advice units. The task will also be carried out by the Institute of Plant Protection – National Research Institute, Research Institute of Horticulture, Institute of Cultivation, the Institute of Soil Science and Plant Cultivation – National Research Institute in Puławy, and the State Veterinary Institute – National Research Institute in Puławy under multi-annual programmes delivered by these institutes. The Integrated Plant Production Scheme will be overseen by the State Plant Health and Seed Inspection Service subject to the limits of budget expenditures of the Chief Plant Health and Seed Inspector, and by province governors.

Cooperation in this respect is planned to be established with provincial agricultural advisory centres, farmers' self-governing organisations, local governments, and agricultural universities and schools, as well as organisations active in the field of agriculture.

11. Action 11. Analysis of risks associated with the use of PPPs

Orienting regulatory and surveillance activities regarding trade in and application of plant protection products to relevant risk areas and efficient policy making by the state in the area of plant protection products requires establishing an efficient system for collecting and analysing data regarding risks associated with the use of PPPs, as well as raising the awareness of PPP users on how to handle pesticides. This Action works towards achieving the objectives laid down by Article 15 of Directive 2009/128/EC.

In light of the above, checks, monitoring, and statistical surveys will be carried out within the framework of the National Action Plan to obtain information on the effect of plant protection products on the environment. The thus obtained data will be used to calculate pesticide risk indicators.

To this end, the following specific tasks will be implemented.

Task 1. Statistical surveys on plant protection products

For the needs of the National Action Plan, use will be made of statistical surveys conducted by the Central Statistical Office pursuant to the provisions adopted on the basis of Article 18(1) of the Public Statistics Act of 29 June 1995 (Journal of Laws of 2018, item 997, as amended) and data from surveys conducted by the Ministry of Agriculture and Rural Development.

The following subtasks will be delivered as part of the task.

Subtask 1. Conducting statistical surveys on sale of plant protection products

Statistical surveys on the sale of plant protection products will be conducted by the Central Statistical Office in cooperation with the Ministry of Agriculture and Rural Development and the Institute of Plant Protection – National Research Institute.

Subtask 2. Conducting statistical surveys on the consumption of plant protection products

The task will be carried out through statistical surveys conducted in line with the methodology set out by Regulation (EC) No 1185/2009 of the European Parliament and of the Council of 25 November 2009 concerning statistics on pesticides (OJ L 324, 10.12.2009, p. 1, as amended) by the Central Statistical Office in cooperation with the State Plant Health and Seed Inspection Service, the Ministry of Agriculture and Rural Development and the Institute of Plant Protection – National Research Institute.

The aim of the surveys will be to determine the average consumption of active substances expressed in kg/ha for individual agricultural plant species. The surveys will take into account the structure of crops and production volumes, as well as data on the sale of plant protection products in randomly selected farms.

Subtask 3. Conducting surveys on integrated pest management

In order to get a full picture of the effectiveness of actions taken under the National Action Plan, there is a need for current data on farmers' awareness of the principles of integrated pest management and on whether they follow the right procedures during the preparation of plant protection treatments, application of PPPs, and immediately after the treatment. Such data will be collected through surveys known as Polska Wieś i Rolnictwo (Polish Rural Areas and Agriculture), carried out by the Ministry of Agriculture and Rural Development, and through surveys of the structure of agricultural holdings carried out by the Central Statistical Office.

Task 2. Checks and monitoring regarding plant protection products

In Poland, the authorities carry out checks specified in applicable legislation. Monitoring is carried out to check whether plant protection products are used properly. The monitoring is conducted by areas: human safety (including food safety), animal safety, and environmental safety. For the most part, the monitoring consists of tests for residues of plant protection products or their metabolites.

The results of the analyses will be the basis for assessing the degree to which the objectives of the National Action Plan are being achieved, and for possible revision of legislation concerning trade in and use of plant protection products.

The following subtasks will be delivered as part of the task.

Subtask 1. Checks of food of plant origin for the presence of residues of plant protection products

Bodies of the State Sanitary Inspectorate conduct official inspections of food of plant origin produced and placed on the market, as well as of food of animal origin placed on the market – in line with their respective competences laid down by the Food and Nutrition Safety Act of 25 August 2006 (Journal of Laws of 2017, item 149, as amended) and by the State Sanitary Inspectorate Act of 14 March 1985.

As regards tests for pesticide residues, the State Sanitary Inspectorate, subject to the annual sampling plan, conducts the following:

- 1) coordinated EU monitoring (pursuant to Commission Regulations concerning coordinated multi-annual control programmes of the Union for the individual years);
- 2) monitoring and official checks for pesticide residues in food;
- 3) border control (in accordance with EU and national legislation on border control).

As regards pesticide residues, the delivery of the above plan comprises:

- 1) checking food on the domestic market for the presence of pesticide residues and verification of

compliance with applicable MRLs, as specified by 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;

- 2) assessment of consumer exposure and activities within the framework of the Rapid Alert System for Food and Feed (RASFF), or other measures in the event when MRLs are found to have been exceeded.

Sixteen Provincial Sanitary and Epidemiological Stations participate in exercising control over pesticide residues in food. Samples for testing are collected by staff of district sanitary and epidemiological stations and, where applicable, by staff of border stations, in accordance with Regulation of the Minister of Health of 17 October 2007 on the collection of food samples to determine pesticide residues (Journal of Laws, item 1502). Testing of food for pesticide residues is conducted by the accredited laboratories of 5 Provincial Sanitary and Epidemiological Stations: in Warsaw, Łódź, Opole, Rzeszów, and Wrocław. When non-compliance with the maximum residue limit value for pesticides is found for food placed on the market, at the request of the Chief Sanitary Inspector, experts of the National Institute of Public Health – National Hygiene Institute in Warsaw assess the risk for consumers.

Subtask 2. Checking feed for the presence of residues of plant protection products

Within the framework of the implementation of the Official Feed Monitoring Plan, the Veterinary Inspectorate monitors feed for the presence of organochlorine and organophosphorus pesticide residues. The system for feed monitoring, and the powers and responsibilities of competent authorities are specified in the Feeds Act of 22 July 2006 (Journal of Laws of 2017, item 453, as amended). District Veterinary Officers are the supervisory bodies that oversee the feed sector as a whole, excluding the production of and trade in medicated feed, which are supervised by Regional Veterinary Officers. Samples are taken from feed materials of plant origin and compound feed for animals. Veterinary border control of products of plant origin used in animal nutrition is exercised by border veterinary officers.

Subtask 3. Checking food of animal origin for the presence of residues of plant protection products

The responsibility for checking food of animal origin for residues of plant protection products, including organochlorine pesticides and polychlorinated biphenyls, as well as of organophosphorus pesticides, lies with the Veterinary Inspectorate. The legal basis is Article 16(3) of the Act of 16 December 2005 on products of animal origin (Journal of Laws of 2017, item 242, as amended) and Regulation of the Minister of Agriculture and Rural Development of 21 June 2017 on monitoring unauthorised substances, chemical and biological residues, medicinal products and radioactive contamination (Journal of Laws, item 1246), which transposes into Polish law Council Directive 96/23/EC of 29 April 1996 on measures to monitor certain substances and residues thereof in live animals and animal products and repealing Directives 85/358/EEC and 86/469/EEC and Decisions 89/187/EEC and 91/664/EEC (OJ L 125, 23.5.1996, p. 10, as amended - OJ special Polish edition; chapter 3, vol. 19, p. 71). The guidelines of the Residue Testing Programme, its plan, and the results of the tests are elaborated by the State Veterinary Institute – National Research Institute in Puławy, approved for implementation by the Chief Veterinary Officer, and then accepted by the European Commission.

Task 3. Development of the indicators and assessment of the risk associated with the use of PPPs

Based on data obtained from checks, statistical surveys on the sale and use of plant protection products, and from the systems for the monitoring of phenomena related to the application of PPPs, under a multi-annual programme implemented by the Institute of Plant Protection – National Research Institute, the national indicators of risks associated with the use of PPPs which were developed under the National Action Plan for 2013-2017 will be refined, and appropriate calculations of the values of these indicators will be made. In the years to come, the indicators will be helpful in analysing risks linked to the use of PPPs and will form a basis for managing the risks and for the PPP policy making.

11.1. Action delivery method

The Action will involve:

- 1) collection and analysis of data obtained through checks, monitoring and statistical surveys on trade in

- and use of plant protection products;
- 2) updating and calculation of indicators measuring the risk associated with the use of PPPs.

11.2. Measures used for monitoring

Given the nature of this Action, which works towards improving the effectiveness of the other actions under the National Action Plan, no individual metrics have been defined to assess its implementation.

11.3. Entities responsible for implementation

The Action will be implemented by the Ministry of Agriculture and Rural Development, Ministry of Health, Ministry of the Environment and by units reporting to or supervised by the Minister of Agriculture and Rural Development, Minister of Health, or the Minister of the Environment, the Central Statistical Office, subject to the limits of budget expenditures granted to the individual units of the public finance sector involved in the implementation of the Action. The Action will also be implemented subject to the limits of budget expenditures of province governors, and by the Institute of Plant Protection – National Research Institute, and Research Institute of Horticulture under multi-annual programmes delivered by these Institutes.

12. Action 12. Providing effective supervision of marketing and use of PPPs

Providing professional users of PPPs with appropriate knowledge and tools for them to be able to reduce the use of PPPs to the necessary minimum is only one way of mitigating the risk of the occurrence of irregularities related to the marketing, packaging and application of plant protection products. Control activities by state services aimed at eliminating detected irregularities are also necessary in this respect. For them to be effective, such activities are based on risk assessment that allows checks to be targeted at the areas with the highest probability of irregularities.

Pursuant to the Plant Protection Act of 18 December 2003, the responsibility for overseeing the marketing, packaging and use of plant protection products rests on the State Plant Health and Seed Inspection Service. Eliminating breaches of the legal provisions that govern the marketing and packaging of PPPs contributes significantly to reducing the risk associated with marketing them, and subsequently with their use.

The scope of the above tasks performed by the State Plant Health and Seed Inspection Service includes:

- 1) control over the marketing of plant protection products (preventing unauthorised or counterfeit products that pose unknown risks to humans, animals and the environment from being placed on the market and their elimination from the market);
- 2) testing of the quality of plant protection products on the market;
- 3) supervision of the use of PPPs by agricultural holdings engaged in crop production, at sites where seed treatment and fumigation treatments are performed, at agricultural products storage facilities, in areas where the use of plant protection products may be subject to restrictions or may be prohibited, as well as in other places where PPPs are used, including checking for compliance with the principles of integrated pest management;
- 4) supervision over the application of plant protection products with aerial equipment;
- 5) testing agricultural crops for residues of plant protection products as part of verifying proper use of plant protection products.

Under the Action, effective supervision over marketing of PPPs and the application of plant protection products is planned.

To ensure the effectiveness of the Action, there is also a need for suitable cooperation between the national authorities responsible for supervising the marketing and use of plant protection products and the authorities of other Member States.

The activities of the State Plant Health and Seed Inspection Service will be primarily focused on:

- 1) protection of pollinating insects during plant protection treatments;
- 2) protection of the aquatic environment during plant protection treatments (compliance with the buffer zone requirements);

- 3) compliance with the requirements regarding the technical condition of pesticide application equipment;
- 4) elimination of counterfeit plant protection products from the market.

In order to ensure the highest effectiveness of inspections carried out by the State Plant Health and Seed Inspection Service, within the framework of the National Action Plan for 2013-2017, the Institute of Plant Protection – National Research Institute developed mathematical and statistical tools for risk analysis and inspection planning. These tools will be refined under the National Action Plan.

12.1. Action delivery method

Under the Action:

- 1) checks will be conducted on the marketing and use of plant protection products;
- 2) risk analysis and check planning tools will be improved.

12.2. Measures used for monitoring

Given the nature of this Action, which works towards improving the effectiveness of the other actions under the National Action Plan, no individual metrics have been defined to assess its implementation.

12.3. Entities responsible for implementation

The Action will be implemented by the Ministry of Agriculture and Rural Development subject to applicable limits of budget expenditures and by units reporting to or supervised by the Minister for Agriculture and Rural Development. Tasks related to the supervision of the marketing, packaging and use of PPPs will be fulfilled by the State Plant Health and Seed Inspection Service subject to the limits of budget expenditures of the Chief Plant Health and Seed Inspector, and by province governors. The Action will also be implemented by the Institute of Plant Protection – National Research Institute, and the Research Institute of Horticulture under multi-annual programmes delivered by these Institutes.

13. Action 13. Optimisation of the protection of minor and organic crops

The protection of plants with low consumption of chemical preparations includes integrated pest management and organic farming.

The implementation of the principles of integrated pest management requires providing agricultural producers with appropriate tools, including products containing active substances classified as low risk, as well as substances authorised for use in organic crops, which minimise the risk of negative impact on the environment.

The selection of PPPs should not only ensure the possibility of protecting individual crops, but also alternate use of PPPs containing various active substances. Apart from chemical plant protection products, agricultural producers should also be able to use biological preparations containing microorganisms or macroorganisms or basic substances.

The non-availability of optimum plant protection products is particularly noticeable in organic farming, where use can only be made of preparations containing specific active substances, as well as in the case of minor crops.

The lack of plant protection products authorised for use in minor crops is a factor increasing the risk of breaches of the provisions on the use of such products, including the risk of use inconsistent with the label.

Regulation (EC) No 1107/2009 of the European Parliament and of the Council of 21 October 2009 concerning the placing of plant protection products on the market and repealing Council Directives 79/117/EEC and 91/414/EEC (OJ L 309, 24.11.2009, p. 1, as amended) provides that the procedures for the authorisation of PPPs for trade can include such mechanisms as zonal registration, mutual recognition of authorisations (including for minor uses), and extension of authorisations for minor uses.

In light of the above, the Action will prioritise work towards ensuring the appropriate range and selection of plant protection products authorised for use in organic farming, as well as basic substances.

13.1. Action delivery method

The Action will involve:

- 1) research and analyses to ensure an appropriate range and selection of plant protection products, taking into account minor and organic crops;
- 2) consultations with representatives of agricultural organisations, producer groups, science, advisory organisations, and PPP producers.

13.2. Measures used for monitoring

The plans include the issuance or extension of the scope of at least 50 authorisations for plant protection products annually in respect of minor uses or uses in organic farming, in particular PPPs containing low-risk active substances or substances intended for use in organic farming.

13.3. Entities responsible for implementation

The Action will be implemented by the Ministry of Agriculture and Rural Development subject to applicable limits of budget expenditures and by units reporting to or supervised by the Minister of Agriculture and Rural Development. The task is to involve cooperation with agricultural organisations and producers of plant protection products.

V. Summary

The actions taken by Poland under the National Action Plan, as well as those pre-dating this document, have resulted in the implementation of the principles of integrated pest management and have contributed to significant reduction or, in some areas, elimination of identified risks posed by plant protection products. In addition, Poland has adopted legal provisions as well as system solutions that guarantee full transposition of Directive 2009/128/EC. It must be stressed in this context that some of the solutions ensuing from the directive were present in the Polish legal system before.

Even though the use of plant protection products have increased as a result of the evolution of Polish agriculture, it still remains on a much lower level than in the European countries where intensive agricultural production prevails. The testing of food of plant and animal origin, as well as of feed for PPP residues have revealed very low levels of exceedances of PPP residue values in light of the European Union law, which means that Polish food is safe for consumers.

Recent years have also seen a decline in the number of cases of human poisoning with PPPs, with the figure dropping from 616 in 2013 to 450 in 2016.

The National Action Plan builds on lessons learned from the implementation of the previous plan. It also takes into account the findings of the mission of the European Commission carried out in Poland from 7 to 14 June 2017 in order to evaluate the implementation of measures to achieve the sustainable use of pesticides, as a consequence of which some of the previous actions have been modified. New actions responding to the current needs linked to reducing the risk associated with the use of PPPs have also been added. Regardless of the above, promoting the general principles of integrated pest management remains the key objective of the National Action Plan.

This follows from the fact that widespread implementation of the principles of integrated pest management by professional users of PPPs, but also by non-professional users, is the greatest contributor to the rationalisation and sustainable use of PPPs, including the protection of pollinating insects.

The National Action Plan also provides for measurable indicators for assessing the risks associated with the use of PPPs for human and animal health and the environment, including those linked to the consumption of PPPs.

Broad participation of the public during the preparation of the National Action Plan was ensured. Opinions were gathered from the research community, agricultural organisations, and bodies of the public administration.

VI. Consistency of the National Action Plan with strategic documents concerning agriculture

Sustainable use of plant protection products has become one of the priorities of the Polish environmental policy. The restructuring and modernisation of the Polish economy have contributed to reducing the level of pressure on the environment. The National Action Plan addresses the crop production-related aspects of the environmental policy. The preservation of beneficial organisms within field crop areas is one of the most crucial elements of biological protection, which is a priority in the search for non-chemical methods in pest control.

The National Action Plan is compatible with the Responsible Development Plan adopted by Resolution of the Council of Ministers of 16 February 2016, and with the new medium-term national development strategy, i.e. the Responsible Development Strategy for 2020 (with an outlook for 2030), which was adopted by the Council of Ministers by Resolution of 14 February 2017 and which is an elaboration on the RDP. The central objective of the development-oriented activities of the above Strategy is to “create conditions for increasing the incomes of the residents of Poland while enhancing the social, economic, environmental, and territorial cohesion”. The document stresses that increasing the competitiveness of agricultural holdings and agri-food producers by improving their profitability, integrating the food chain and fairer distribution of the added value within the chain based on partnership has crucial importance for ensuring sustainable and responsible development of the country.

In addition, specific objective 1 of the Strategy – Sustainable economic growth increasingly based on knowledge, data, and organisational excellence, provides for seven areas of intervention, including three dedicated to the development of the agri-food sector: 2. Public institutions supporting the development of entities of the sector, 4. Competitive agricultural holdings and agri-food producers, and 7. Support for local drivers of entrepreneurship. The above areas are designed to increase the efficiency of the functioning and availability of agricultural advisory services, to support the production and distribution of high-quality and highly-innovative products, including traditional, regional, and ecological products. Notably, one of the strategic projects fitting into the above areas of intervention is an efficient system of agricultural advice, which involves strengthening and improving the effectiveness of agricultural advisory services, *inter alia*, by: improving the system of training for agricultural advisors, improving competence in the transfer of knowledge from science to practice, and modernisation of the methods for running agricultural activities and managing a farm. Providing advisory services is also one of the key tasks of the National Action Plan. The main objective of agricultural advice is to disseminate knowledge and the latest information related to pest management, which translates into subsequent behaviour of PPP users. Proper behaviour of agricultural producers using PPPs reduces the risks associated with their use to the greatest extent. The Agricultural Advisory Centre in Brwinów and other units responsible for agricultural advice cooperate closely with central and local government institutions dealing, *inter alia*, with pest control, in particular with research institutes, agricultural universities, the State Plant Health and Seed Inspection Service, and agricultural boards, organisations active in the field of agriculture, as well as with other economic operators that supply agricultural inputs. The Agricultural Advisory Centre in Brwinów together with units responsible for agricultural advice are the key institutions that deal with providing continuing education to farmers and rural residents.

The National Action Plan is a direct means of the implementation of the objectives of the Strategy for Sustainable Development of Agriculture, Rural Areas and Fisheries for 2012-2020 adopted by the Council of Ministers by the Resolution of 25 April 2012, which is aligned with the strategic EU objectives and is consistent with the Responsible Development Strategy. Actions designed under the Strategy respond to new civilisational challenges, including population ageing, climate change, generational renewal, the development of information technologies, and professional and territorial mobility. The actions are defined with a view to resources and the functions fulfilled by rural areas, agriculture and fisheries in Poland and worldwide, and are based on the five key issues, namely human capital, quality of life, safety, competitiveness, and the environment. The Strategy expressly points to the need of developing a national action plan for reducing the risks associated with the use of PPPs.

In particular, the National Action Plan is an element of the execution of the Strategy actions defined in:

- 1) Priority 3 Food security;
- 2) Priority 4 Increasing the productivity and competitiveness of the agri-food sector;
- 3) Priority 5 Environmental protection and adaptation to climate change in rural areas.

Priority 3 of the Strategy underlines the need to produce high-quality food responding to the growing

expectations of consumers as a means of increasing the competitiveness and income of producers. The strategy states that “the implementation of and compliance with, *inter alia*, the principles of sustainable use of plant protection products, in particular compliance with the principles of integrated pest management and integrated production, is important in this respect”. Thus, the key objectives of the National Action Plan are fully aligned with the priorities of the Strategy.

Priority 3 of the Strategy focuses on activities ensuring that food placed on the market is safe for consumers. These requirements are reflected by the solutions in the National Action Plan that increase the effectiveness of inspections carried out by the State Plant Health and Seed Inspection Service, as well as by the development of the system for inspecting the technical condition of pesticide application equipment. Since the Strategy highlights the importance of coordination and effective cooperation between the services responsible for monitoring food safety, the National Action Plan includes actions facilitating the analysis and use of data obtained from various inspection bodies.

In addition, Priority 3 of the Strategy puts an emphasis on the need to promote knowledge about the principles of nutrition and raising awareness of agri-food producers, which requires training and advisory activities, including training in food safety for farmers. The above objectives of the Strategy will be pursued by the solutions in the National Action Plan that aim at developing plant protection consultancy, as well as by mandatory and voluntary training for farmers.

The National Action Plan also delivers Priority 4 of the Strategy, emphasising the importance of: promoting environmentally friendly technical solutions in agricultural production, dissemination of information on modern technical and organisational solutions, and of providing professional advice. The Plan implements the objectives of the Strategy included in this Priority, which comprise supporting and implementing innovations conducive to increasing productivity under the conditions of sustainable agricultural production.

The National Action Plan also fits into Priority 5 of the Strategy, which indicates the need to:

- 1) provide a training system for professional users of plant protection products, distributors of PPPs and advisers providing services related to pest control;
- 2) raise the awareness of the general public regarding plant protection products;
- 3) ensure supervision over the technical condition of pesticide application equipment used;
- 4) protect the aquatic environment and drinking water against contamination with plant protection products;
- 5) reduce the use of pesticides or the associated hazards in areas accessible to particularly vulnerable groups of the population and areas of ecological value;
- 6) implement the principles of integrated pest management by professional users of PPPs;
- 7) monitor risks associated with the use of PPPs.

It should also be noted that Area 2 of the Action Plan of the Ministry of Agriculture and Rural Development for 2015-2019 “Agriculture, food production, rural development as a strategic task for the state” names two tasks linked directly to the subject matter addressed by this National Action Plan:

02.04.10 Consistent implementation of the National Action Plan to Reduce the Risk Associated with the Use of Plant Protection Products for 2013-2017 and drafting a new Plan after 2017.

02.04.11 Ensuring compliance with the principles of integrated pest management.

Thus, the National Action Plan also contributes to the delivery of the Action Plan of the Ministry of Agriculture and Rural Development.