Monitoring EU SUD compliance in Sweden, Denmark, Poland, Germany, Italy and the Netherlands: PAN's suggestions for better future

PAN's suggestions for better future auditing and implementation



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In 2017, the European Commission, the Directorate-General for Health and Food Safety, and Directorate F for Health and Food Audit Analyses (HFAA), undertook six fact-finding missions to evaluate the implementation of the EU Directive on the Sustainable Use of Pesticides (SUD).

The objectives of the missions were to:

- Investigate the implementation of measures to achieve the sustainable use of pesticides, under Directive 2009/128/EC of the European Parliament and of the Council, hereinafter referred to as the Sustainable Use Directive (SUD).
- Identify obstacles/difficulties encountered in the SUD implementation, as well as good practices with regard to the implementation of the Directive

The 6 fact-finding reports relating to the visits in the Netherlands, Denmark and Germany, Italy, Sweden, Poland were prepared by HFAA and published after agreement with the national competent authorities (CA). They were released in late 2017 early 2018.

PAN Europe fully recognizes the value of these fact-finding missions, and the fact that these missions have allowed the European Commission to prepare its long-awaited <u>evaluation</u> report (as foreseen in the SUD), which was forwarded to the European Parliament and the Council in October 2017, and which concludes that the implementation of the SUD remains patchy (as mentioned in the PR).

PAN Europe thanks PAN Germany, PAN Italy, Naturskyddsforeningen, as well as other organisations and a number of individual experts for their helpful contributions to this report.

Brussels, October 2018

However, when reading though these six reports we conclude that:

- The topics analysed and discussed with Member States were not the same in all six reports.
- 2) The conclusions in each report appear unrealistically positive in relation to the actual findings, as they minimize evident obstacles/difficulties.
- 3) The 'good practices' described in the reports are far from those which PAN Europe would have identified as good practices.

As the SUD asked Member States to prepare National Action Plans (NAP) back in 2011, and to re-evaluate them after five years, the majority of Member States are currently re-evaluating and developing their NAPs. This report by our Organization could serve as an inspiration for this aim and give some guidance on how the EU could assist Member States in the future.

We propose:

- A more coherent structure for future audits and reports on the SUD, which would allow better use of the findings in the future.
- Ways to use the findings to create better interactions between Member States in their NAP developments in the future.
- Finally, we ask that future audit reports on the SUD should classify NAPs into six categories:

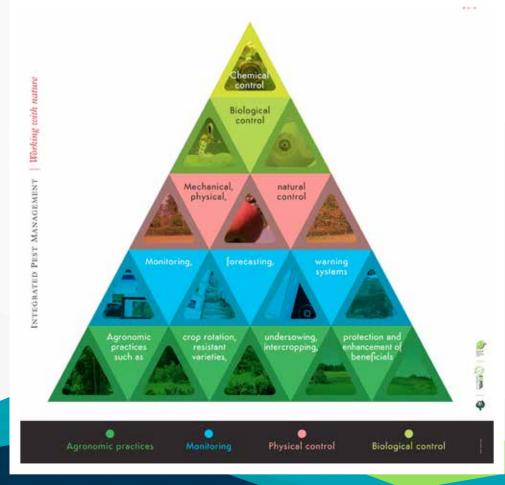
Bad situation and bad progress	Bad situation but good progress
Reasonable situation and poor progress	Reasonable situation and good progress
Good situation but poor progress	Good situation and good progress

In our report, we have ranked the NAPs and progress for the six Member States in question.



The report on the implementation of the Directive 2009/128/EC on the Sustainable Use of Pesticides (SUD) dated 21st October 2009, which was prepared by the European Commission and sent to the European Parliament and the Council on the 10th October 2017 (COM(2017) 587 final), among other things concludes:

"Integrated Pest Management is a cornerstone of the Directive, and it is therefore of particular concern that Member States have not yet set clear targets and ensured their implementation, including for the more widespread use of land management techniques such as crop rotation. the Commission will support the Member States in the development of methodologies to assess compliance with the eight IPM principles, taking into account the diversity of EU agriculture and the principle of subsidiarity".



Member States have to assist farmers in the uptake of IPM:

Article 14 of the SUD specifies that all farmers must take up the general principle of IPM as from January 2014: "Member states shall take all necessary measures to promote low pesticide-input pest management and organic farming, giving wherever possible priority to non-chemical methods", and as part of that:

- "Provide information and tools for pest monitoring and decision-making, as well as advisory services on integrated pest management." (Article 14.2)
- "Establish appropriate incentives to encourage professional users to implement crop and sector-specific guidelines for integrated pest management on a voluntary basis."
 (Article 14.5)

Many organic farmers have been showing that alternatives exist for years. We recognize that using non-chemical measures might pose economical disadvantages for single farmers who have invested in spraying techniques, who have no experience in mechanical weed control and who follow a very narrow crop rotation system dominated by a limited number of cereals over time.

However, we contend that not using chemical-synthetic pesticides leads to savings in health costs, drinking water treatment costs and ecological costs (loss of biological diversity, reduction of pollination capacity, costs of resistance formation, etc.). The assertion that there are no economically justifiable effective alternatives is politically motivated, and is not based on science which has practical relevance.

Member States have to identify the mandatory and voluntary aspects of IPM, and integrate these into the Common Agricultural Policy:

Recital (35) of the EU Regulation No. 1107/2009 on PPPs, relating to the principles of integrated pest management, states unequivocally: The Council should include in the statutory management requirement referred to in Annex III to Council Regulation (EC) No 1782/2003 of 29 September 2003 establishing common rules for direct support schemes under the common agricultural

policy and establishing certain support schemes for farmers (1), the principles of integrated pest management, including good plant protection practice and non-chemical methods of plant protection and pest and crop management.

In the 2013 reform of the Common Agricultural Policy (CAP), MS did not accept the European Commission's proposal to integrate the SUD (and the WFD) into the mandatory cross compliance rules.

Instead it was agreed that SUD would become part of the cross compliance (direct payment) requirement only after MS had defined farm-level rules: "The Council and the European Parliament invite the Commission to monitor the transposition and the implementation by the Member States of Directive 2000/60/EC of 23 October 2000 establishing a framework for Community action in the field of water policy and Directive 2009/128/EC of the European Parliament and of the Council of 21 October 2009 establishing a framework for Community action to achieve the sustainable use of pesticides and, where appropriate, to come forward, once these Directives have been implemented in all Member States and the obligations directly applicable to farmers have been identified, with a legislative proposal amending this regulation with a view to including the relevant parts of these Directives in the system of cross-compliance." (Addendum 2 to the CAP reform agreement of 25th June 2013)

A positive element of the compromise deal is that it will be mandatory for MS to inform farmers about reducing pesticide use – introducing so-called Integrated Pest Management - as part of the Farm Advisory System (FAS): "Member States as something new need to advise on 'implementing Article 55 of Regulation (EC) No 1107/2009 of the European Parliament and of the Council (6), in particular requirements concerning the compliance with the general principles of integrated pest management as referred to in Article 14 of Directive 2009/128/EC of the European Par-

liament and the Council (7)".

This was translated into law as follows: Regulation (EU) No 1306/2013, which applies as from 1 January 2015, stipulates in recital (11) that "The farm advisory system should cover at least the obligations at farm level resulting from cross-compliance standards and requirements. ... That system should also cover the requirements imposed on beneficiaries by Member States in order to implement specific provisions of Directive 2000/60/ EC of the European Parliament and the Council (2) and for implementing Article 55 of Regulation (EC) No 1107/2009 of the European Parliament and of the Council(3), in particular requirements concerning the compliance with the general principles of integrated pest management as referred to in Article 14 of Directive 2009/128/EC of the European Parliament and the Council (4)". Article 12.2 (e) specifies that the FAS needs to be able to inform farmers about: "requirements at the level of beneficiaries as defined by Member States for implementing Article 55 of Regulation (EC) No 1107/2009, in particular the requirement referred to in Article 14 of Directive 2009/128/EC.". However, only the first and second sentences of Article 55 were incorporated into the Statutory Mandatory Requirements (SMR 10), whereas references to article 14 of the SUD were not included.

In the new CAP legislative proposals regarding CAP beyond 2020 published by the European Commission in June 2018¹, the European Com-

 $^{^1\,}https://ec.europa.eu/info/food-farming-fisheries/key-policies/common-agricultural-policy/future-cap_en$

mission again proposes to integrate SUD into the SMRs. But also this time the is no specific reference to article 14, specifying that farmers must apply Integrated Pest Management as of January 2014. Instead the new CAP legislative proposals propose to integrate following articles: article 5(2) which states that farmers need to be trained, to article 8(1) to (5) which reference to the need for farmers to check their equipment, to article 12 with regard to restrictions on the use of pesticides in protected areas defined on the basis of the Water Framework Directive and Natura 2000 legislation, and article 13(1) and (3) on handling and storage of pesticides and disposal of remnants.

This is simply not good enough!

There can be no doubt that all farmers have to reduce their dependency on pesticides to be in compliance with the SUD!

Farmers need to apply the eight principles of IPM, which is defined in the annex of the SUD, with the last principle being:

'8. Based on the records on the use of pesticides and on the monitoring of harmful organisms the professional user should check the success of the applied plant protection measures.'

There can be no doubt that all farmers have to reduce their dependency on pesticides to be in compliance with the SUD!

Training is a tool, not an end in itself

In the audits done in the period 2012-2016 some aspects of the SUD were examined, especially relating to training. The aspect of training also gets a lot of attention in all the 2017 fact-finding reports, and is in many Member States considered a success factor. PAN Europe contests this approach: training in itself can never be a success factor, but is only a tool for achieving something of more practical significance. The example given below with photographs are a clear illustration of this argument.



A testimony from the ground (Koen Hertoge Malles):

I am a little frustrated to read that according to official Italy, everything (or almost everything) seems to be OK, but when I see on a daily basis how the pesticides are used, I really wonder if the training of the user is as good as it is claimed. we have a thousand of witnesses since years showing how the spraying is done. (the way it is done, not considering the meteorological situation with a lot of wind).

We invited every official to come and see our films and also to look in the area, that the training of the user is not efficient enough.

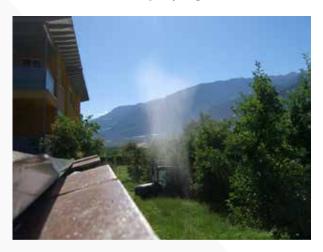
I have the impression that this is a paper-audit, which is very theoretical.

Indeed, if I read the agrios-guidelines (IPM in south-tyrol for apple production), it looks amazing. if these guidelines are followed according to their paper, we would not have a problem (or at least less).

www.agrios.it

Look at the results of our playground study done last year: it shows that 46% of the tested playground are contaminated with pesticides used in IPM in south-tyrol. In val venosta 76% is contaminated.

Photos of farmers spraying from Malles (Italy)









3. Comments on the six fact-finding reports prepared in 2017

This section contains PAN Europe's comments on the reports from the 6 fact-finding missions in the <u>Netherlands</u>, <u>Denmark</u> and <u>Germany</u>, <u>Italy</u>, <u>Sweden</u>, <u>Poland</u>.

As stated in the introduction, while the reports

were prepared by the European Commission, the Directorate-General for Health and Food Safety, and Directorate F for Health and Food Audit Analyses (HFAA), these reports were only released after agreement from the national competent authorities.

3.1 The Swedish fact-finding report

PAN Europe and its Swedish member, Naturskyddsföreningen, find the conclusions in the Swedish fact-finding report extremely weak when it states, among other things: "The current National Action Plan focuses on reducing the risks associated with, and dependency on, pesticides. It establishes clear objectives, with specific targets in some cases."

Also, the statement: "The Competent Authorities

have taken a range of measures to implement the Directive. These include systems for training professional users and distributors, and for testing pesticide application equipment. Aerial spraying has been prohibited, and no derogations have been granted to date. Measures have been put in place to protect the aquatic environment and drinking water, and data from the monitoring of municipal water supplies demonstrates high levels of compliance with drinking water quality standards."

The reality is that while Sweden has a long history in reducing pesticide exposure, the main new element introduced as part of the National Action Plan (NAP) that Sweden introduced to comply with the EU Directive on Sustainable Use of Pesticides (SUD) is the aim to reduce pesticide residues in water to close to nil. Sweden is still far from reaching that objective! The Swedish NAP lacks clear reduction targets and timetables, making it impossible to measure progress.

1) Overall quantitative objectives and targets of the Swedish NAP are missing

The fact-finding report explains in point 8-12 that the Swedish NAP is focused around the following targets:

- 1) Reducing the risks to the environment and to health, as assessed by:
 - i. the proportion of agricultural land under organic cultivation,
 - **ii.** the number and total size of protected areas (surface water or ground water used for drinking water),
 - **iii.** the proportion of conifer saplings protected using non-chemical methods,
 - iv. the proportion of non-chemically treated seed,
 - **v.** the use of growth regulators in crops other than rye,
 - vi. the use of pesticides in cereal crops before harvest.

- **2)** Reducing the levels of pesticides in surface and groundwater to almost zero by 2020, in line with the Swedish Parliament's 'Non-toxic environment' environmental quality objective, as assessed by:
 - **i.** findings of pesticides in water monitoring programmes,
 - **ii.** the number and total size of protected areas, (equal to 1.ii)
 - **iii.** the proportion of agricultural land under organic cultivation, (equal to 1.i)
 - **iv.** statistics on the sales of products containing bentazone, pendimethalin and the various pyrethroids.
- **3)** Ensuring that pesticide residues in domestically grown produce are low and do not present a risk to consumers, as assessed by:
 - i. monitoring changes in the total intake of pesticide residues from domestically grown vegetables,
 - **ii.** the quantities of growth regulators used in cereals, (equal to 1.v)
 - **iii.** the proportion of agricultural land under organic cultivation. (equal to 1;i)
- **4)** Ensuring that professional users of pesticides are exposed to a low level of risk by taking safety measures and establishing appropriate working processes, assessed by:
 - **i.** monitoring the goals on the basis of statistics and other investigations,
 - **ii.** monitoring the use by professional users of personal protective equipment.

- **5)** Developing sustainable cultivation systems to a greater extent, including alternative approaches or techniques, in order to reduce dependency on chemical pesticides, assessed by:
 - i. reports from supervisory projects on the application of the rules governing IPM.
 - **ii.** the proportion of agricultural land under organic cultivation, (equal to 1.i)
 - **iii.** the proportion of conifer saplings protected using non-chemical methods, (equal to 1.iii)
 - **iv.** the proportion of non-chemically treated seed, (equal to 1.iv)
 - **v.** the use of growth regulators in cereal crops other than rye. (equal to 1.v)

The report concludes in point 7 that "The NAP has five main objectives, but there are very few specific quantifiable targets established in the plan. Finally, while progress towards achievement of four of the objectives can be measured, at least to some extent, there are no clear criteria proposed to measure progress in developing sustainable cultivation systems, leading to a reduction in dependency on chemical pesticides."

However, a serious problem in the Swedish NAP is highlighted in point 5 in the statement: "previous action plans focused on use reduction, the current NAP focuses on reducing the risks associated with, and dependency on, pesticides. The Competent Authorities (CA) stated that this fundamental change in policy occurred because their experience showed that reduction in use is not the most effective means to reduce the risks associated with pesticides."

PAN Europe's Swedish member, Naturskyddsföreningen, was very involved in the preparation of the first Swedish NAP back in 2011, and agrees with many of the overall objectives. However, we all agree that it is time to identify quantifiable reduction targets and clear timetables to ensure the necessary transition.

2) Impossible to measure progress in the implementation of the NAP

Point 61 says: "The toxicity index shows the incidence of pesticides detected in aquatic environments, and is a measure of the risks of potential harm to aquatic organisms. It has been used since 2002, with 2002 as the baseline year. The Competent Authorities reported that due to the nature of this indicator, results can vary significantly between years, but that the overall trend in this indicator has remained broadly unchanged since its introduction."

If the purpose is to reach zero residues of pesticides in water, surely the trend in this indicator should be lowering?

Point 62 says: "the NAP identified certain active substances under Article 15 (2)(b) of the SUD, and the CAs monitor trends in their use. These substances are pendimethalin, because of its bio-accumulative and persistent properties, bentazone, because of the frequency of its detection in Swedish groundwater at levels above 0.1µg/l and pyrethroid insecticides, due to findings in surface water monitoring in 2010. Sales of pesticides containing these active substances have remained broadly unchanged over the last eight years, except for pendimethalin containing products, which are no longer authorised."

Again, it is not acceptable that the objective in itself is collecting statistics. It is time to introduce serious reduction targets and clear timetables for achieving reductions.

no system of monitoring or controls at individual grower level to determine compliance with the eight principles of IPM as described in Annex III of the SUD."

Both points 57 and 67 mention that "There is

It is time for Sweden to introduce reduction targets and timetables at farmer levels.

The European Commission should ask the Swedish Competent Authorities for clarification regarding:

- Identifying specific targets and timetables and how they were reached, to measure the result and the progress
- Informing as to how the IPM uptake is linked to the different CAP instruments (mandatory and voluntary aspects)
- Informing about the independence of the support offered to farmers in the uptake of IPM (farm advisory systems, early warning systems, guidelines), and
- Whether they will consider adding good practices, such as, for a start, whether Sweden intends to introduce a diversified pesticide tax (as has been done in Denmark and Norway) and raise it to suitable levels

Ranking of the Swedish NAP and progress in the five years implementation period:

very good starting point, but little progress having been achieved in the first NAP

Other best practices that Sweden could learn from:

- Sweden could learn from the overall introduced reduction targets and timetables in Denmark and France.
- Sweden could learn from the Netherlands as to how farmers register their IPM.

Good practices identified in Sweden:

HFAA identifies good practices as being the training of distributors who sell pesticides to non-professionals, and the pest monitoring systems.

PAN Europe would have highlighted following as being good practices from Sweden:

- The Swedish adoption of a non-toxic environment plan back in 2010, which is definitely a unique move in the EU.
- Sweden has a long history of banning/ phasing out pesticides for certain uses, which is reflected in point 63 including post-harvest treatment with pesticides of fruit and ware potatoes, the use of pesticides for soil disinfection, and, as mentioned in point 7, the aim of stopping the use of seed treatment, growth regulators etc.
- Sweden had an original objective of increasing organic production methods to 20% of all utilized agricultural land, and the current proportion of Swedish UAA is 19%. As part of the revised NAP this percentage has been increased to 30% of all Swedish UAA by 2030².
- The NAP's main quantifiable objective of making Swedish water pesticide-free is a serious objective of the NAP (although full implementation has not been achieved to date).

Besides these, the following aspects of the

Swedish NAP should be considered good practice:

National protection of towns prohibiting pesticide use in specific areas, with point 33 explaining: "the CAB, or municipality, can enact a set of rules to protect water quality in these water protection areas. Under these rules, the use of pesticides may be banned or, more typically, prohibited except under a licence. Municipalities grant these licences on a case by case basis, based on an application and having considered a range of factors such as the pesticides to be used, soil type and what alternative plant protection measures have been applied to avoid the need for pesticide use."

The requirement that permits must be granted in order to spray in Nature 2000 areas, with point 38 explaining: "In Sweden, Natura 2000 sites are protected under the terms of the Swedish Environmental Code and are all classified as being of national interest. Natura 2000 sites are nature protection areas comprising Special Areas of Conservation under Council Directive 92/43/EEC and Special Protection Areas designated under Directive 2009/147/EC. Sweden has listed around 4 000 Natura 2000 sites, with a total area of around 6 million ha, or around 15% of the total area of Sweden. Under Swedish law, there are no specific regulations on the application or handling of pesticides in Natura 2000 areas, so the general provisions for environmentally hazardous activities in Natura 2000 areas apply meaning that a permit is required for all activities that may have a sig-

² http://www.scb.se/contentassets/93c76eaa82a74784a1da5d6feaf8106d/jo0114 2017a01 sm jo13sm1801.pdf, https://www.regeringen.se/49192c/contentassets/13f0fe3575964442bc51816493165632/handlingsplan lms 1702072.pdf

nificant impact on the environment in Natura 2000 areas. Permits can only be issued if the proposed activity does not damage the natural habitat in the area to be protected or cause detriment to the species that are to be protected. These permits are granted by the relevant CAB, and SEPA, SwAM, SFA and the Swedish National Heritage Board all have the right to appeal such decisions. The CAs added that in practice, very little cultivated agricultural land is present, and very low volumes of pesticides are used, in Natura 2000 areas".

Tuesdays and discuss the results with commercial advisors by telephone every Wednesday. SBA then produce weekly regional bulletins for advisors and growers based on the monitoring data and provide information on pest thresholds and crop protection recommendations, where relevant. These weekly bulletins are available online and via mobile applications. Decision support systems are not widely used in by advisory services in Sweden. They are used to complement existing monitoring systems by the SBA, and for evaluation purposes".

The experience of non-spraying as a model being spread to farmers, with Point 49 explaining: "An information and warning system is operated by the five Plant Protections Centres of the SBA (http://www.jordbruksverket.se). SBA staff monitor approximately 1 000 plots in commercial fields of cereals, legumes and vegetables every Monday between April and August. The monitored plots are generally not sprayed with pesticides except for high value crops, in relation to which the CAs stated that the absence of chemical treatments would cause significant yield losses. SBA staff analyse these monitoring data on

Early warning of pesticide spraying to bystanders, with point 26 explaining "the public must be informed at least one week prior to pesticide use in areas where persons could be exposed to spray drift. This is done by the spray operator/landowner, by erecting signs at the location to be treated. These signs must remain in place for one month after the treatment has been applied". As explained in the PAN Europe report from 2010, some Swedish towns, such as Malmö, fence off areas recently treated with pesticides, such as sidewalks, to block bystanders from entering them.



3.2 The Danish fact-finding report

PAN Europe and its Danish members find that the overall conclusion set in the Danish fact finding report is more of an explanation than a valid conclusion.

We welcome the identification of shortages in the Danish implementation of the Directive, which are summarized in point 93 as follows:

there is no system of monitoring or controls either at individual grower level or at national level, to determine compliance with the eight principles of IPM as described in Annex III of the SUD, as described in paragraph 66.

- not all available IPM tools are widely used at farm level, as described in paragraph 80.
- there are difficulties in assessing compliance with the principles of IPM at individual grower level, as described in paragraph 84.
- there are difficulties in obtaining data on chronic poisoning associated with pesticides, as described in paragraph 43.

The reality is that while the Danish NAP approved back in 2011 contained a lot of interesting aspects, many of these objectives were not reached.

The Danish fact-finding report starts very promisingly, with the Danish Competent Authorities (CA) in point 14 saying "environmental protection must always take precedence over agricultural interests, if and when there are conflicting interests." Again, in point 39 where the CA recognises: "there is a high level of awareness of issues around pesticides in Denmark, and that among the general population, there is a desire to have less use of pesticides. They added that in general, people are willing to accept the presence of weeds on pavements and golf courses as a consequence of reduced pesticide use in these areas".

We are therefore surprised that the same Danish competent authorities have not been doing more to reinforce the promises made in the original Danish NAP approved back in 2011.

1) The reduced level of ambition in the implementation of the NAP objectives, especially in relation to the protection of water and the uptake of IPM

Originally, as part of the implementation of the SUD, the Danish authorities developed a points

rope, an interesting approach in the implementation of the eight principles of IPM. However, the system was abolished before its effectiveness could be measured, as mentioned in point 73, and replaced by *three key themes in the IPM*

area: an IPM task force which will advise on the choice of future approaches to IPM, a partnership for promoting precision technology in the application of pesticides, and resistance management. Definitely far from the eight IPM principles identified in the SUD.

This must be considered a failure, as also explained in point 80, where the advisory service (SEGES) stated that "there is an increasing prob*lem controlling grass-weeds on some farms"*. They attribute this primarily to growers concentrating on growing winter crops, rather than having a better rotation with more spring crops, which would facilitate more cultural controls. They add that growers are given incentives to focus on winter crops, as very often these are the most profitable, and in addition, farmers are required to maintain green cover on their land throughout the year as a water quality protection measure. While the CAs are aware of this issue, to date they have not introduced any specific initiative to promote better rotations, but DEPA has added this as an area of possible future action under the new NAP.

2) The Danes appear to suggest that the few should be representative of the many:

PAN Europe notices the argument put forward by the Danish Competent Authorities in point 84, which highlighted two hindrances to measuring the implementation of, and hence verifying compliance with, IPM. First, they stated that

Regulation (EC) No 1185/2009/EC on pesticide statistics could provide for very useful data relevant to the implementation of IPM under SUD at EU level, but they noted that to date there has been no synergy between the two pieces of legislation. They believe that data collected under Regulation (EC) No 1185/2009/EC could be used to identify trends at an EU level, for example, in the use of specific pesticides, or on particular types of crops. Second, they stated that, as IPM is a series of principles, their position is that it is not possible to determine compliance in a very strict sense, and therefore it should remain outside any system of formal controls on the individual grower, such as Cross Compliance.

However, in point 66 the Danish competent authorities consider that the NAP benchmark of all users complying with the principles of IPM has been achieved. This assertion is based upon the achievement of a 40% reduction in the pesticide load as described in paragraph 24, rather than on any data on compliance levels from controls on end-users.

Such an approach is not acceptable. The fact that a few convert to organic farming is not a sufficient solution to the generalized problem, as is foreseen in article 14 of the SUD. Using general figures to measure compliance of cross compliance (which applies to individual farmers) is not accepted. It is necessary for all farmers to engage in working towards a serious reduction in pesticide use.

The European Commission should ask the Danish authorities to:

- define the mandatory and voluntary IPM requirements as set out in recital (35) of the EU Regulation 1107/2009 on PPPs, which states clearly, in relation to the principles of integrated pest management: The Council should include in the statutory management requirement referred to in Annex III to Council Regulation (EC) No 1782/2003 of 29 September 2003 establishing common rules for direct support schemes under the common agricultural policy and establishing certain support schemes for farmers (1), the principles of integrated pest management, including good plant protection practice and non-chemical methods of plant protection and pest and crop management.
- consider all eight aspects of IPM for immediate action, not only three, without waiting for the new CAP, which is not to be implemented before 2022. IPM has been mandatory for farmers to apply all over Europe as from January 2014.
- explain the inconsistency between the original NAP objectives on drinking water and actual developments in the same period (see point below)

3) The Danish NAP is not delivering the desired results, especially not in relation to the protection of Danish drinking water:

Point 53 of the Danish fact-finding mission states that "Monitoring data show high levels of compliance with water quality standards for currently authorised pesticides, thus meeting one of the benchmarks of the NAP."

The Danish Green Growth Plan which was the basis of the NAP 2010-15 proposed:

- Expanding organic crop cover to 15% of the Danish SAV in 2020 (from c 6% in 2008); corresponding to an increase of 230,000 hectares, making a total of c 400,000 ha
- Establishing mandatory 10-metre nonsprayed, non-fertilised and unfarmed

- (footnote) buffer zones on all water courses by 2012, corresponding to 50,000 ha
- Establishing mandatory 25-metre spraying-free buffer zones around public drinking water sources corresponding to 800 ha

The Danish National Action plan specifies that Denmark must "ensure that we keep the world's best and cleanest groundwater now, in ten years and in the longer term" specifying, among other things, "we can continue using untreated groundwater for our drinking water".

Among the actions proposed on pesticides are: "The Danish Pesticide Leaching Assessment Programme will be strengthened by ensuring that more samples are taken and analysed for more substances. Modelling will improve utilisation of data and the results will be assessed more quick-

ly. If the leaching assessment programme shows a possible risk for specific pesticides, the use of them will be prohibited and authorities will aim at making agreements with agriculture and the chemicals industry on fast termination of the use and/or withdrawal of the relevant pesticides from the market in order to obtain a faster effect with the least inconvenience to the industries."

Effect: Faster implementation of restrictions to ensure better protection of the groundwater.

Strengthened cooperation between authorities, enterprises and organisations.

In order to reduce pollution of groundwater from already banned substances and from point sources, cooperation between authorities will be intensified. This will be done by describing the various options for identifying and managing point sources. Knowledge must be shared between the authorities, organisations, the water enterprises a.o.

Effect: Fewer prohibited pesticides in groundwa-

ter and less point source pollution with approved substances."

However, in the summer of 2017, one drinking water company, almost by chance, tested for Desphenyl Chloridazon. This active substance was used in the period 1964-1996 as a herbicide and in the production of sugar beets, beets and onions. It was banned in Denmark in 1996. As the substance was found, other water companies started testing too, leading to wells being closed due to the discovery of Desphenyl Chloridazon. Most recently, the Ministry of the Environment has recommended that drinking water companies should start testing for the fungicide called 1,2,4-triazol, in the name of the precautionary principle, and this has triggered debate about initiating water filtration.

The Danish fact-finding report fails to identify the difficulties in implementation, or to mention the reduced ambitions of the NAP, which should have been included.

Ranking of the Danish NAP and progress in the five years implementation period:

Good starting point, but with little progress having been made in the first NAP

We recall that the EU Environmental Implementation Review Country Report - DENMARK of February 2017 concluded that one of the main challenges in environmental protection in Denmark is to "Reduce pressures on nature from intensive agriculture, including the use of pesticides and nutrients".

The revised Danish NAP seems similarly powerless to protect drinking water, as the Danish Nature Conservation revealed from newly accessed official documents in June 2018³

³ https://www.dn.dk/nyheder/ny-aktindsigt-regeringen-droppede-sprojtefrie-zoner/

Best practices which Denmark could learn from

- Denmark could learn from Sweden as to how a national law can protect towns wishing to ban pesticides to protect drinking water (assisting towns like Egedal, Aarhus and Aalborg see below).
- Denmark could learn from the Netherlands how farmers register their IPM uptake.

Identification of good practices in Denmark:

HFAA identifies the following good practices in point 94: the Pesticide Leaching Assessment Programme, the incentives to facilitate the authorisation of non-chemical pesticides, and the use of technology for precision pesticide application in the case of railways.

PAN Europe identifies as good practice:

- The overall pesticide load indicator and the objective and timetables, and as part of that the pesticide tax: these are not mentioned as good practices, but only mentioned in the descriptive conclusion.
- The precautionary actions to protect their drinking water by banning the use of chemical pesticides in certain areas, which have been undertaken by three Danish towns (Aarhus, Aalborg and Egedal), and which the towns of Sonderborg and Skanderborg are now also considering introducing⁴. These have been omitted from the list of 'good practices'.



⁴ https://www.dr.dk/nyheder/indland/skanderborg-vil-beskytte-drikkevandet-klar-til-forbyde-landmaend-sproejte

3.3 The Dutch fact-finding report

PAN Europe and its Dutch members are disappointed with the conclusion of the Dutch fact-finding report when it states: "Although the NAP does not establish quantitative objectives, targets, measures or timetables, these are incorporated into a higher level policy document on sustainable plant protection... The Competent Authorities monitor the progress on an on-going basis and adjust policies, targets and measures based on experience".

And further: "Significant progress has been made with regard to development and implementation of a wide range of IPM measures. A set of different public and private tools are available to support decision making and facilitate farmers in PPP selection, with particular attention being paid to environmental impacts of PPPs".

A reading of the detailed report quickly reveals that this conclusion reflects a rather negative reality:

1) No specific quantitative use reduction targets and timetables have been set despite the SUD

The Dutch authorities have many years of experience in regulating pesticides, including use, but although no clear objectives and quantifiable targets have been set, point 11 explains: "The NAP of the Netherlands covers the period 2013 – 2018. It does not set up quantitative objectives, targets, measures or timetables, but it contains some qualitative targets and, in particular, specific measures, most of which are related to the implementation of Articles 11 and 12 of the SUD".

The Dutch NAP is explained in point 15 as being focused on water: "With regard to quantitative objectives set in the GGDO, most of these are related to water quality and water protection, including the following:

- Reduction of the exceedances of the Environmental Quality Standards (EQS) for pesticides in surface water by 50% in 2018 and by 90% in 2023;
- Reduction of the exceedances of drinking water standard (0,1 ug/l) at the abstraction locations by 50% in 2018 and by 95% in 2023;
- No EQS exceedances in surface water in 2027 (river basin management plans under Directive 2000/60/EC);
- No drinking water quality standards exceedances in 2027 (river basin management plans under Directive 2000/60/EC)".

This is simply not good enough because compliance with regulatory requirements cannot be objectives in a NAP!

2) In relation to IPM – it is crystal clear that the level of public engagement is far from satisfactory:

Point 68 among others says "In recent years the Netherlands has invested in the development and dissemination of knowledge on IPM, through demonstration projects, advisory services, decision-support systems, training, websites and publications in farmers' journals."

But in points 84-88 it is explained that the following services are being delivered by private, not public bodies: 1) advisory services, 2) fore-casting, warning and early diagnostic systems in place, 3) guidance documents and 4) demonstration farmers.

The lack of publicly owned advisory services, pest monitoring, guidelines and demonstration farms are fundamental deficiencies within the Dutch system.

3) The level of ambition seems to have lowered during the implementation period

Points 72-77 explain the wider picture of IPM requirements for Dutch farmers in the statement: "Before 2015, all professional users were obliged to have plant protection plans (covering IPM), which was a condition under national legislation and, therefore, were subject to control during cross-compliance checks.

In 2015, the plant protection plans were replaced by mandatory "plant protection monitors", where all IPM measures (chemical and non-chemical) have to be recorded by the farmer. The NVWA staff check if the monitor is available and kept up-to-date during the growing season. However, as IPM is no longer a condition under national legislation, it is not currently checked during cross compliance checks".

In practice this means that the Dutch introduced the general principle of IPM into cross compliance in 2014 as defined in recital (35) of the EU Regulation on 1107/2009 on PPPs, but removed it again in 2015.

Why did the European Commission not question this decision? And why was the original plan not identified as a good practice at the

time, and used to encourage other Member States to do the same?

4) Competent authorities are apparently finding it difficult to monitor progress, contrary to what is being concluded

The fact-finding report says: "The plant protection monitor should be kept up to date during cultivation and completed within two months after the end of the growing season. Records kept are required to cover all IPM measures taken (Annex III of the SUD), including: crop rotation, use of resistant or tolerant planting material, including seeds, biological, physical and non-chemical methods, which must be given preference, selection of PPPs based on risks for environment and humans, monitoring of harmful organisms, use of warning and forecasting systems and resistance management. The plant protection monitor is meant to help growers to evaluate their IPM approach and adapt it for the following growing season, which is considered a good practice. As the plant protection monitor is a new instrument, its effectiveness is not known yet. Its evaluation will be part of the evaluation of the GGDO in 2018.

Plant protection monitors are checked by the Dutch Competent authorities (NVWA staff) during inspections at grower level. However, it is quite difficult to assess whether professional users have considered all alternative measures available to achieve low pesticide-input pest control. The reason for this is that IPM measures applied by growers may vary, depending on several factors, e.g. the crop, the pest, the region, the weather conditions and the interaction between all these. This was stated by the CAs to be a dif-

ficulty in the implementation of the SUD and, in particular, concluding on the level of implementation of IPM general principles".

5) However, the fact-finding report makes reference to something that could turn out to be a useful tool

"The survey showed that, in general, IPM measures were used to a higher extent in greenhouse vegetable production and to a lesser extent in tulip production and arable crops. Results from the survey demonstrated that some IPM measures were not implemented to their full potential.

With regard to IPM general principles, the survey demonstrated that none of these is used to their full potential. One of the conclusions of the survey was that the plant protection monitor could be a tool for continuous monitoring of IPM implementation and subsequent improvement".

The Dutch survey from 2016 might provide a basis for the development of IPM in the Netherlands, but it has definitely not been used to its full potential so far. We therefore question the HFAA's conclusion regarding Integrated Pest management (in point 91) which states:

"The Netherlands has invested a lot in the development and dissemination of knowledge and, as a result, a wide range of IPM measures have been developed and introduced into practice, where all main players made joint efforts to achieve progress. Although the obligation for growers to keep plant protection monitors is considered a good practice, inspectors find it difficult to assess and conclude on the implementation of IPM general principles. However, there was a common commitment among social partners to make further progress on the implementation of IPM and work is ongoing on a more system based approach to improve the resilience of crops and cropping systems".

It is a misapprehension to leave the IPM implementation in the hands of social partners... The Netherlands have had a risk reduction plan since the 80s, but pollution keeps on happening, for instance in water, as admitted in point 49: "The monitoring data show that in more than 50 % of the locations, EQS are exceeded for one or more active substances, and about 90 active substances are found to exceed EQS at one or more sampling locations".

The Dutch water company Vitens has put a price on this pollution: Dutch consumers pay more for their tap water because farmers continue to use toxic pesticides like Roundup in their pastures, according to water company Vitens. Cleaning up the groundwater costs Vitens around 15 million euros extra every year, as the company said to De Gelderlander⁵.

⁵ https://nltimes.nl/2018/04/23/dutch-tap-water-expensive-due-poison-pastures-water-company

The European Commission should ask the Dutch competent authorities to:

- re-introduce the mandatory IPM requirements into cross compliance, as was already done in 2014 (this is especially relevant as the Dutch is one of the Member States having the highest coalition between direct payment/ha and pesticide use in 2013-2015, see PAN Europe's position paper);
- explain how IPM can be considered to have been implemented, when monitoring data show that water keeps on being seriously contaminated;
- explain how independence in pesticide use can be promoted, in a situation where services relating to farm advisory services, early warning systems and guidelines are being developed by the private sector? There should also be questions as to the role of social engagement, and the involvement of NGOs.

Ranking of the Dutch NAP

PAN Europe would rank the Dutch NAP as a good starting point, but with depressing progress having been achieved in the first NAP

Good practices which the Netherlands could learn from:

- The Netherlands could learn from Denmark and France as to the establishment of overall objectives and timetables for pesticide dependency reductions.
- The open approach in respect of collaboration with and integration of social partners is positive, but the weighting needs to be seriously reconsidered: for instance, while members of the association of pesticide representatives (NEFYTO) and members of the farmers' associations (LTO) are profit-making, the environmental and public health associations are not. One of the results is that industry representatives have a greater presence in stakeholder meetings regarding the preparation and implementation of the NAPs. Belgium has recently introduced a role in the stakeholder committees on pesticides which aims to create a balance of interests, so that different partners are allowed the same speaking time in the committees. However, for this approach to succeed fully, there needs also to be funding for environment and health NGOs to develop an actual pesticide campaign.
- The Netherlands could learn from Denmark and Sweden about independency in its IPM support systems. It could learn from Italy how to avoid receiving advice on IPM from pesticide companies.
- The Netherlands have some strict rules regarding use of certain pesticides (e.g. soil fumigation can only be used every five years). However, the Netherlands could learn from Sweden about the gradual upscaling of IPM by phasing out other uses.

Best practice from the Netherlands

HFAA mentions, among others, good practices from the Netherlands as being related to Pesticide Application Equipment, handling and storage, water protection, the plant protection monitor, and approval of low risk substances.

PAN Europe agrees that it a good practice that growers are obliged to keep plant protection monitors, also regarding crop rotation etc. We welcome the fact that Dutch data are being collected in detail, allowing the Dutch to monitor single active substances. Finally, we welcome the IPM survey done in 2016, which investigated the potential to develop sector-specific IPM further, and note with interest the conclusions drawn.

We wonder why the following, which we consider should have been included, are not mentioned in the listing of good practices:

• point 59: "In the Netherlands, the professional non-agricultural use of PPPs on hard

- surfaces is prohibited since May 2016, and since November 2017 for other non-agricultural areas".
- point 60: "With regard to sports and recreation grounds, it is the responsibility of their managers to minimise PPP use before 2020 (GDs 188 and 189 mentioned above, paragraph 29). It is planned to introduce a prohibition of PPP use in these areas in 2020. Other restrictions apply for PPP use in protected areas, defined in the WFD (See Chapter 5.8 Water Protection, paragraph 53). In the case of conservation areas (as defined in Directives 79/409/EEC and 92/43/EEC), PPP use is subject to prior approval".

Finally, regarding water protection in the Netherlands and collaboration with the Water Boards, it is worth citing the project of <u>Hoecke Waard</u> which has managed to create 550 km of pesticide-free buffer strips along water courses in the past, and which is continuing, even though specific financial support to farmers has ceased.



3.4 The Italian fact-finding report

We welcome the statement in the Italian fact-finding report in point 22, pointing out that "The NAP does not contain quantitative objectives, or specific targets, to measure progress on implementation, as required by Article 4(1) of the SUD, but only deadlines for a few specific measures".

PAN Europe and our members fully agree with the conclusion on the Italian NAP in point 28, which states: "At the time of the mission, there was no clear picture regarding the implementation of the NAP and the effectiveness of measures in place to achieve the sustainable use of PPPs. This was because of the delay in the adoption of the NAP, the delay in the first evaluation and the lack of data relating to some indicators".

However, the Italian audit report is unacceptably weak in a number of places:

1) The report accepts certain erroneous arguments regarding IPM:

Point 89 states that the "Statutory IPM measures include: application of techniques to prevent pest infestation; pest monitoring; use of biological pest control methods, where available and effective; recourse to appropriate farming practices and selection of PPPs, which entail the least risk for human health and the environment. These are a legal obligation for all PPP professional users, and relevant CAs check to what extent growers are aware of general IPM principles during routine inspections at farm level under Article 68 of

Regulation (EC) No 1107/2009. However, there is no element of monitoring or verification that IPM general principles are applied in practice. The relevant CAs were of the opinion that free access to information on pest control and advisory services are enough for the implementation of statutory IPM".

We insist that Italy should start defining their mandatory criteria without delay.

2) More clarity on CAP supported offered to farmers on delivery of IPM

Point 90 mentions that farmers are offered rural development financing for certain aspects: "such as cultivation dates, sowing date, crop development stages throughout the growing season, use of fertilisers, dates and quantities of PPP purchased and used during the growing season".

PAN Europe would like Italy to deliver all the relevant details regarding sector-specific requests, farmers and area covered, payments offered to farmers etc.

3) Essential use derogations, IPM uptake and CAP payments

The report does not look into the fact that Italian farmers have been granted a very large number of essential use derogations given within Article 53 of the Regulation (EC) No 1107/2009, all listed here. Many of these are hazardous pesticides⁶ given as multiple derogations, for in-

⁶ https://www.academia.edu/32439784/Pesticidi da vietare.pdf

stance on rice, granted year after year, which in reality means that Italian farmer keep on using banned pesticides, and are still eligible to receive first pillar payments despite the fact that compliance with EU regulation 1107/2009 is one of the Statutory Mandatory Requirements of the Common Agricultural Policy.

The current Italian NAP is not delivering, as exemplified by water contamination:

The fact-finding report states in point 71, based on ISPRA's monitoring report 2013-2014: "For surface water monitoring data generally show a high level of compliance with EQS. Although a list of priority substances is established at national level, and it is regularly up-dated, taking account of a range of criteria, there is a wide variation between regions in the scope of the analysis conducted. This is seen as a limitation for comparing data and drawing conclusions at national level".

PAN Europe wonders why the fact-finding report does not mention that many Italian regions are not monitoring or partially monitoring pesticide residues in water, as mentioned, for instance, by Italian Doctors for the Environment (ISDE) as well as others^{7,8}? How is it possible to conclude that Italy is complying with EQS when there are significant regional differences where water is being monitored?

The way forward for the Italian NAP

There is a real risk of delay in the publication of Italy's new NAP, and it is necessary to take into account ISPRA's <u>2015-16 report</u> on pesticides in water published in April 2018, which stated that pesticide pollution was continuing: "Nel 2016, in particolare, ci sono pesticidi nel 67,0% dei punti delle acque superficiali e nel 33,5% di quelle sotterranee. Sempre più evidente è la presenza di miscele, con un numero medio di circa 5 sostanze e un massimo di 55 sostanze in un singolo campione".

We recall that the CAs in point 84 recognize that "in order to reduce the environmental impact of agricultural production, it is necessary to promote gradual reduction in the volumes of PPPs used". The way forward is, among other things, to introduce quantitative use reduction targets and clear timetables, while also creating specific IPM targets.

We propose building on the national Pest Monitoring networks in order finally to start quantifying the Italian pesticide use reductions and introduce following indicators. These networks are explained in point 92: "based on surveys and on-the-spot visual checks. Visual checks cover: plant health status of the crop(s), crop development stages, level of infestation for pests (pheromone or other types of traps) and, where considered necessary, plant samples may be taken for further analysis. Monitoring data is recorded in an electronic system".

 $^{^{7}\ \}underline{\text{https://www.pugliareporter.com/2018/06/29/glifosato-e-altri-fitofarmaci-nellacqua-in-puglia-partono-le-ricerche-per-evitare-danni-alla-popolazione-video/}$

⁸ https://link.springer.com/article/10.1007%2Fs11356-018-2511-3

In conclusion, we believe that there is a need for Italy to undertake increasing numbers of controls to ensure compliance with the EU Directive⁹, and to start being much more proactive in promoting low impact farming systems¹⁰, showing regions how this can be done.

We encourage the European Commission to ask the Italian Competent Authorities to:

- Develop solid indicators showing real engagement for both NAPs (pesticide use reductions) and IPM (arable land applying alternative techniques); a concrete proposal on solid indicators is included in the overall recommendations.
- Define the mandatory and voluntary IPM requirements as defined in recital (35) of the EU Regulation on 1107/2009 on PPPs which, with regard to the principles of integrated pest management, clearly states: "The Council should include in the statutory management requirement referred to in Annex III to Council Regulation (EC) No 1782/2003 of 29 September 2003 establishing common rules for direct support schemes under the common agricultural policy and establishing certain support schemes for farmers (1), the principles of integrated pest management, including good plant protection practice and non-chemical methods of plant protection and pest and crop management".
- Explain the high use of essential use derogations, and, as part of that, provide information as to whether the essential use derogations are in any way related to cuts in farmers' CAP payments in the period in question.
- Explain why water monitoring systems in Italy are incomplete, and what is being done to improve this.

Agronomic crep rotation unders wing, projection and

Also: perhaps infringement procedures against Italy should be initiated, as the executive summary states: "controls to determine compliance with the eight principles of Integrated Pest Management as described in Annex III of the Directive are confined to growers who receive financial support for participation in voluntary schemes". Control of IPM needs to be done for all farmers, not only the ones receiving specific payments linked to IPM, as implementation of IPM for all farmers has been mandatory since 2014, according to article 14 of the SUD.

⁹ https://www.corriere.it/dataroom-milena-gabanelli/sport-pesticidi-cosa-mettiamo-piedi-giocando-calcio-golf-rug-by/569c608e-64d9-11e8-95f7-d0bed95533ca-va.shtml

¹⁰ http://www.greenstyle.it/pesticidi-italia-al-primo-posto-in-europa-per-utilizzo-137728.html

Ranking of the Italian NAP

PAN Europe rank the Italian NAP as a weak starting point, with only little progress having been achieved in the first NAP

Good practices that Italy could learn from

- Italy could learn from the French and Danish reduction targets and timetables.
- Italy could learn from Belgium how to assist towns in going glyphosate-free (and expand this ban to include all pesticides).
- Italy could learn from Sweden as to the gradual upscaling of IPM (by phasing out certain uses), while ceasing to apply essential use derogation: a starting point would be for regions to stop offering public funding, which mainly comes from the EU's Common Agricultural Policy, to farmers who use chemical pesticides (eg. Tuscany has recently announced it will no longer offer rural development funding to farmers who use glyphosate¹¹).

Good practice from the Italian NAP

HFAA identifies the pest monitoring network as a good practice in point 102. PAN Europe and its members recognize that certain areas of Italy have established an interesting pest monitoring network, where computer systems are calculating pest spreads, which is discussed and adjusted in weekly meetings with advisors, However, this is not done though out Italy, but only in certain areas. Also, PAN Europe has in the past taken part in one of these meetings and noticed the absence of certain potentially relevant representatives, and the lack of focus on preventative and non-chemical measures, resulting in chemical pesticides being discussed as a first resort, with no reference being made

to non-chemicals, despite the SUD clearly highlighting "giving wherever possible priority to non-chemical methods".

HFAA identifies crop-specific IPM guidelines as another a good practice. Again, guidelines have been developed, but the advisors/cooperatives who are advising farmers do not give priority to non-chemical measures or the preventative approach using the IPM triangle and the eight principles of IPM first: an example is the pesticide spraying in Prosecco.

Finally, HFAA mentions the surveillance system in place for acute poisoning cases as a good practice. We wonder why there is no reference to the many <u>victims of pesticides</u>, among others, in the area of Prosecco?

¹¹ http://firenze.repubblica.it/cronaca/2018/08/12/news/rossi la toscana vieta l uso del glifosato del in agricoltura e cancerogeno -203946328/

PAN Europe would have highlighted the following as good examples, with provvisos regarding practice:

- To our knowledge, the most important aspect of the current NAP is that the pesticide industry should no longer be able to provide advice on pesticide use. Yet farmers are still being advised by the industry, at least in some regions, so we doubt that this requirement is seriously being implemented.
- Italian towns cannot use glyphosate in pesticide free towns, but the Italian competent authorities seem to lack an overall plan to help all the 8100 Italian towns reach this objective.

Other than the examples identified as 'good practices' in point 102 are:

- the town of Malles had the world's first referendum on banning pesticide use in the town: 73% of all citizens voted in favour, with the law being implemented as from April 2018.
- Vallarsa and Malosco, in the name of the precautionary principle, have established 50-meter buffer strips towards residential areas, in which areas farmers are not allowed to spray any chemical pesticides.



3.5 The German fact-finding report

The conclusion in the fact-finding report for Germany prepared by the European Commission HFAA appears to indicate that pesticide use reduction is evolving positively in Germany, according to this statement: "Germany's NAP is the most recent manifestation of a thirty year project to reduce the risks associated with pesticides, through promoting their sustainable use to protect plants and plant products. Through a range of actions including equipment testing and training, the risks associated with pesticides had already been considerably reduced prior to the introduction of EU legislation in this area.

The current NAP sets clear targets and timelines to further reduce the risks and impacts of pesticides, and to provide growers with the tools necessary to produce high-quality, safe food. Considerable progress has been made under the current NAP, most notably, the continued reduction in the environmental risks associated with pesticides."

PAN Europe and PAN Germany disagree with this uncritical conclusion.

1) The overall objective of the NAP is limited to pesticide risk reduction

It not acceptable that the report fails to criticize the fact that the German NAP only considers one objective of the SUD, namely the "risk

and impact reduction". The objective "to reduce the use and the dependence on pesticide use" is explicitly omitted and in consequence the non-achievement of these objectives will not be monitored let alone prevented¹². This forces the impression that there is no real political will to reduce pesticide dependency, nor to introduce and support non-chemical alternatives. So it is no wonder that the volume of pesticides sold in Germany has been going up for years.¹³

Throughout the report, there seems to be acceptance from the European Commission's side each time the German Competent Authorities argues that there are no non-chemical alternatives available. This lack of critical review is unacceptable.

Furthermore, it is deeply regrettable that nowhere in the German fact-finding report is it mentioned that all the formerly engaged German environment and health NGOs, the professional beekeepers' organization and one of the two largest water supplier associations left the NAP-Stakeholder Forum in 2011, which inevitably exerted a negative influence on the German NAP's ambition and implementation. Among the reasons for these organizations quitting the so called "NAP Forum" were the lack of transparency regarding the decision-making process, the ignorance of relevant indicators and/or measures the stakeholders tried to introduce

^{12 &}quot;The focus of the Action Plan is on reducing risks to humans, animals and the environment that can emerge through the use of approved plant protection products. Thereby, health, social, economic and environmental impacts are taken into account": https://www.nap-pflanzenschutz.de/en/about-the-national-action-plan/

¹³ https://www.bvl.bund.de/DE/04 Pflanzenschutzmittel/01 Aufgaben/02 ZulassungPSM/03 PSMInlandsabsatzExport/psm_PSMInlandsabsatzExport_node.html

and the failure to respond to the request of fixing time-frames for the achievement of relevant indicators.

The refusal to serve as a fig leaf masking a very weak implementation of the SUD only came after the stakeholders had put years of hard work into constructive participation.

2) The German approach to IPM is weak and not acceptable

In point 52 the report states that the overall objective of the NAP is the uptake of the following Farmer Practices:

- All farmers to use no more than the "necessary minimum" quantity of pesticides in 95% of cases for the crops grown, based on data from a network of reference farms throughout the country, on an ongoing basis.
- 20% of the agricultural and horticultural area to be under organic farming without a deadline for achievement.
- Officially recognised crop or sector specific IPM guidelines, developed by grower organisations, to be available for all crops and non-crop areas, by 2018.
- 30% of agricultural and horticultural farms to farm in accordance with the relevant IPM guidelines 3 years after publication, rising to 50% 5 years after publication.

In Germany there is no systematic and individual monitoring of farmers' compliance with general or specific IPM guidelines. As a result,

the farmers' uptake of IPM cannot be assessed. Instead, compliance with the "necessary minimum" is determined based on an examination of spray records of the last season from a network of 146 reference farms considered to be typical growers. JKI stated that on average, 96% of growers are compliant in this area. But the 'necessary minimum' is not based on the best IPM standards per culture and region but instead on the average practices of last year's pesticide use. It can be used to monitor pesticide use but in PAN's view it is highly unsuitable as a pesticide risk- or use-reduction target. Participation in the network the figures are based upon is voluntary for farmers and does not include an obligation to submit documentation of pesticide applications at all (see CA comments on the fact-finding mission). Furthermore, the report highlights "the very high compliance rates throughout the pesticide marketing and use chain...". In fact, only 2.5% of professional pesticide users per year are checked under the German pesticide control program (see CA comments on the fact-finding mission report).

Finally, to date, there has been no establishment of IPM record-keeping nor any official system for monitoring farmers' compliance with IPM. Official advice for IPM implementation is only established for 52 so-called "Demonstration farms".

Such an approach is not suitable for achieving the goals of SUD, it lacks ambition and transparency. Moreover the proposed IPM model is unacceptable.

Part 5.11.5 (points 64-74) repeats what the German Competent Authorities regard as blocking factors in the move towards IPM, identified as being: the availability of non-chemical control techniques, the growing issue of resistance, and finally the requirements of the food retailer sector. However, if the Competent Authorities are not aware and do not promote the many non-chemical alternatives to pesticides (that are the only solution to resistance issues), who will?

In point 60 it is mentioned that "There are no national data on the proportion of habitats and retreat areas in the agricultural landscape for beneficial organisms and non-target organisms". In our view, this should appear in the recommendations of HFAA's report: collection and publication of such data.

The German NAP stated that public institutions, organizations or associations representing certain professional users of plant protection products can develop corresponding crop- and sector-specific guidelines. Compared to other MSs, the German authorities seem to be evading their responsibilities for participating in the development of these important guidelines or for setting timetables. This was criticized in the EC report on the SUD implementation under point 79: "All 28 MSs have provided a range of tools to growers to guide them in IPM. In the case of the six MSs visited, all except Germany, have developed

officially recognized crop, or sector specific, IPM guidelines".

In Germany, there are currently officially recognized guidelines only for sugar beet cultivation and on plant protection in gardens, landscapes and sports grounds. ¹⁴ Though with the SUD IPM became obligatory in 2009, German beetroot farmers had to wait until 2018 to get IPM guidance while for the rest, the NAP still does not provide any crop specific IPM guidelines.

If the only tool you have is a hammer you see everything as a nail!

Almost a decade has passed since the SUD was approved. It is now time to ensure a change of approach. Scrutiny of points 64-74 "Barriers to implementation of IPM" of the German report clearly indicates that pests are becoming more and more resistant to pesticides, and by using a chemical approach farmers are painting themselves into a corner. Instead of facing the problem of resistance at it source by increasing efforts to promote non-chemical plant protection methods, the German NAP presents an out-dated and industry-friendly solution to resistance in increasing the availability of pesticides, as shows the NAP Goal "Improvement of the availability of plant protection products". 15

The NAP states (point 50) that it is foreseen that integrated plant protection and an increase in

¹⁴ https://www.nap-pflanzenschutz.de/praxis/integrierter-pflanzenschutz/leitlinien-ips/, (status on 6th September 2018)

¹⁵ https://www.nap-pflanzenschutz.de/fileadmin/user_upload/_imported/fileadmin/SITE_MASTER/content/Dokumente/ Downloads/Infomaterial/German_NAP_english_Web_2016.pdf, page 23

organic farming will lead to a reduction in the use of pesticides due to the increased use of preventive, non-chemical pesticides [...]". But the German NAP does not recognize and does not reflect the important contribution of organic agriculture for reaching the SUDs goals. But the German NAP does not recognize the important contribution of organic agriculture for reaching the SUDs goals, a fact that is clearly reflected in the goal "to increase in the proportion of agricultural area on which work is performed up to 20%" which lacks a deadline for achievement.

Non-chemical prevention methods and alternative plant protection and pest control methods, which organic farmers have developed and practiced over decades, have been and are being adopted by conventional and integrated farms. Organic farming thus not only plays an outstanding role in the current prevention of pesticide risks, but is also a motor for future, low-input agriculture.

We have serious doubts about the conclusions regarding the German uptake of IPM in points 72-74. In reality, the German IPM seems to be based on the principle of replacing one chemical substance with another. This is not in line with the intentions of IPM. This highly conservative approach is far from the IPM holistic concept. It is thus certainly not innovative, as claimed by Germany.

Point 7 of the report cites good practices as including "Wholly publicly funded advisory services and systems for dissemination of timely plant protection advice operational in some Länder as described in paragraphs 53 and 62". Under point 53, the German fact-finding report says that "The 2008 NAP highlighted the Länder advisory services as a critical part of the sustainable use of pesticides, a position strongly supported by both grower organisations and by the pesticide industry. Growers acknowledged the excellent technical advice available from pesticide companies and retailers, but emphasised the benefits of independent research and advisory services, particularly in promoting alternative techniques to protect plants and plant products".

The involvement of the pesticide industry is a major cause for concern, and advisory services which include 'technical advice' from pesticide companies and retailers should not be considered part of good practice.

In a nutshell, beyond the advice on the proper use of pesticide applications, Germany should build up a competent and independent advisory service to help farmers to convert from conventional to truly integrated or organic agriculture.

Germany could learn from Italy which in its current NAP has made it illegal for pesticide companies to give advice to farmers, but also from Denmark.

An example on how conversion checks are doing in Denmark

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

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

Meanwhile the German interim report on the NAP 2013 – 2016 has been published. ¹⁶ Comparable to the HFAA fact finding mission report, this report mainly contains descriptions of measures and indicators, but few qualitative and quantitative assessments. Often data is not collected or not available for an evaluation, many indicators still have no targets, and if there are targets, only a few positive trends are shown (see PIX, page 58-59).

The current NAP specifies a comprehensive range of 28 indicators to measure progress towards achieving the targets of the NAP (point 75 of the fact finding report). Of the

28 indicators, only 15 indicators set targets and very few timetables. No data for the evaluation of progress is available for 7 of them, and only three indicators show positive trends in target achievement: the aquatic risk indicator SYNOPS (with a very broad baseline timeline of 1996-2005, the proportion of areas/farms with organic farming (with a missing timescale), and the number of drift reducing spray equipment. Concerning the other 13 qualitative indicators, information on trends does not exist for most of them. The only progress observed so far is the increase of biological plant protection practices (based on a 2013 report).

¹⁶ Federal Ministry of Food and Agriculture, BMEL (2018): Zwischenbericht 2013 bis 2016 -Nationaler Aktionsplan zur nachhaltigen Anwendung von Pflanzenschutzmitteln. https://www.nap-pflanzenschutz.de/fileadmin/user_upload/ imported/fileadmin/SITE MASTER/content/Dokumente/Service/nap_zwischenbericht 2013-2016 web_oeff.pdf

Ranking the German NAP

PAN Europe ranks the German NAP as a bad starting point, with little progress.

PAN Europe's 2013 report evaluating the NAPs has already called on the European Commission to initiate infringement procedures against Germany for lacking its engagement.

In the light of the low level of ambition in the German NAP, which has persisted over this period, we repeat this request, and ask the European Commission to start infringement procedures again Germany for not applying relevant provisions of the SUD.

Good practices that Germany could learn from others MSs:

- Germany could learn from Denmark by introducing clear quantitative pesticides use targets and timetables
- Germany could learn from Sweden in their systemic approach towards the uptake of IPM and, as part of that, the constant setting of targets for organic farming.
- Germany could learn from the Netherlands regarding their monitoring of IPM.

Good practice from the German NAP

- The German NAP identified the need to determine the water quality status in smaller water bodies by 2018 (see point 34) and initiated a monitoring. It remains to be seen which measures will follow the monitoring results. After all, it is positive that these small water bodies, which are very important for securing biodiversity, are taken into account, not least because they are not covered by the EU WFD.
- Improved transparency was achieved with the annual reporting of the results of the surveillance of the placing on the market and use of pesticides in the plant protection control program (see points 20, 21) which was initiated under the previous NAP.



3.6 The Polish fact-finding report

The Polish fact-finding report has a descriptive rather than an actual conclusion: "Poland adopted its first NAP to reduce risks and impacts associated with pesticide use in 2013. The main objectives of the plan are the implementation of the general principles of IPM and the reduction of risks associated with the use of PPPs. Actions have been taken to develop and promote the use of IPM tools and to monitor the implementation of the principles of IPM by professional users. However, many of the actions taken do not directly correlate with the targets of the NAP, thus making it difficult to determine whether the objective of the plan to reduce the risks associated with pesticide use are being achieved.

Poland had already established systems for training operators and inspecting spraying equipment prior to the Directive, and both systems have now been modified to align with the Directive. Aerial spraying has been banned, but derogations have been granted for pesticide use in forests. A review of the NAP has recently been initiated, and it is planned that a new NAP will be adopted by the end of 2018. The CAs have identified the low number of applications for authorisation of low-risk and non-chemical plant protection products as a difficulty in developing IPM strategies".

The last point is crucial in the future development of the Polish NAP, as also highlighted by the HFAA.

However, the overall conclusion does not seem to reflect the findings throughout the report, which states, among other things:

Point 15: The Polish CA stated that this first NAP is being used **as an information gathering exercise** that will provide data to establish more appropriate targets for the next NAP.

Point 16 specifies that the NAP is structured according to the following main areas of action:

- Dissemination of the general principles of IPM.
- Modifying the training system for professional users of PPPs, dealers and advisors.
- Increasing awareness of the public regarding PPPs.
- Modifying the system of technical inspection testing PAE.
- Providing plant protection tools for minor uses.
- Providing effective supervision of the marketing and use of PPPs.
- Analysis of risk related to the use of PPPs.
- Application of scientific research for integrated plant protection and limiting risks related to the use of PPPs.

Point 19 concludes: "In many cases, neither the targets established, nor their monitoring results, provide a basis for concluding if risks are being reduced under the current NAP".

Point 33 states that the Competent Authorities "acknowledged that their information on pesticide poisoning was incomplete," while Point 36 says: The report on the implementation of the

NAP for the period 2013 to 2015 provided information on the notifications of suspected poisoning of bees for 2014 and 2015, which numbered 89 and 47 respectively. In 2016, a total of 73 cases of suspicion of bee poisoning were reported. However, SPHSIS stated that a causal link between the death of bees and PPP was proved in just 23 cases over the 3 year period".

It is not acceptable that the main aspect of the Polish NAP, almost a decade after the SUD was agreed, is, as asserted in point 73: "Decisions on pest control must be based on specific monitoring

activities to detect and quantify the presence of harmful organisms. To this end, an online system (www.agrofagi.com.pl) has been developed covering the main pests and diseases of major crops in Poland including winter wheat, winter oil seed rape, sugar beet, potatoes, and maize. This online system collates the information gathered in 206 monitoring stations throughout the country. This website was launched in mid-2016, and had 94 000 visits in its first year. This system has been well received and it is considered as a good achievement to disseminate IPM principles".

Ranging the Polish NAP:

bad starting point, with little progress

Good practices that Poland could learn from almost all Member States, especially:

- Poland could learn about data collection and stakeholder integration from the Netherlands
- Poland could learn from France and Denmark regarding setting overall pesticide dependency reductions and timetables
- Poland could learn from Sweden about the gradual upscaling of IPM (by phasing out certain uses) while ceasing to use essential use derogations.
- Poland could learn from the approval of low risk substances and non-chemical measures from Denmark, Sweden and the Netherlands.
- Poland could learn from Sweden regarding independency
- Poland could learn from the majority of other Member States, and finally increase their VAT levy on pesticides and fertilisers to the general VAT level as already applied in the majority of other Member States¹⁷

¹⁷ http://ec.europa.eu/taxation_customs/resources/documents/taxation/vat/how_vat_works/rates/vat_rates_en.pdf

Good practices from the Polish NAP

In point 90 of the fact-finding report, Mandatory IPM training as part of basic training for farmers and the pest monitoring system are mentioned as best practices.

However, point 62 should have been cited as good practice, as it states: "With regard to conservation of protected areas, the Act on Nature

protection bans the use of PPPs in national parks, national reserves, conservation sites and special areas of conservation. Derogations may be granted by the General Directorate for Environmental Protection, Nature Management Department of Ministry of Environment in cases where there is clear benefit for the area to be treated or when the use of PPPs is included within the management plan of the protected area".



4. Proposals for improving audits in the future

4.1 A more complete overview of the pesticide situation in a Member State could be obtained by:

- Meeting different relevant authorities during all audits in Member States: The audit interviews should always involve not only meetings with representatives from the ministries of agriculture, but also the ministries of health and the environment. Scrutiny of internal correspondence should also be requested, where possible.
- Meeting environment and public health NGOs during all audits: in the Swedish report, it is recorded that the European Commission met with NGOs, and in the Italian report a meeting with environment and consumer NGOs is mentioned. By contrast, the Dutch report states that "the

- mission team met representatives of the agrifood industry and visited one regular and one demonstration farm".
- Analysing environmental and public health NGOs' involvement in the NAP preparation, revisions and implementations, which should be a mandatory aspect of the audits: The German report fails to mention that all the German NGOs left the negotiations for the original NAP.
- Meeting people on the ground, local citizens' groups, including victims of pesticides; listening to the testimonies of pesticide victims across Europe. Bystanders should become part of the audits.

4.2 A coherent structure for future audits reports on the SUD should:

zoom in on agriculture, as this sector is considered especially problematic in the evaluation report done by HFAA in 2017, and should include giving an overview of CAP spending linked to the implementation of the SUD, both within the direct payment and within the second pillar of the CAP, and within the Common Market Organisation for fruit and vegetables. As part of that, the audit reports should:

Always analyse to what extent the eight principles of IPM are being implemented.

- In some reports on the fact-finding missions there are some interesting reflections on bad agronomic practices (Sweden and Denmark), but there is no proposal on how to improve the situation. For instance, the Danish report stresses that Danish farmers are doing less crop rotation, and that more precision farming is being used: such a statement should be challenged. We propose that in future reports the eight principles of IPM should be put up front, and findings and explanations should be analysed in accordance with the IPM triangle developed by PAN Europe (IOBC and IBMA).
- The reports should always give an overview of which essential use derogations are being granted under article 53(2) of EU regulation 1107/2009 on the authorization of PPPs.

 Member States which claim to have implemented IPM should be asked to present the sanctions proposed and implemented on farmers in cases of non-compliance.

Always analyse how the SUD, especially IPM, is integrated into the CAP:

- In some of the fact-finding reports there are statements as to how Member States target pesticide-related aspects within the Common Agricultural Policy (CAP). It would be useful if each report contained an overview of all the CAP measures (both first and second pillar measures) relevant to pesticides, as activated by the Member States.
- Also, it would be helpful if each report explained how Member States have ensured that their Farm Advisory Systems, which since 2015 have been supposed to be able to inform about IPM, are advising farmers on the uptake of Integrated Pest Management, and informing farmers about all the available non-chemical alternatives and measures for reducing pesticide dependency.

Finally, future reports should also look into the aspects of compliance and penalties for non-compliance with IPM.

4.3 Future audit reports should look into how Member States are measuring implementation of SUDs, and the indicators which have been developed.

For PAN Europe the below table gives an overview of the indicators that we consider essential in measuring compliance with the SUDP.

In the future it would be highly beneficial if the reports could incorporate questions along these lines, in order to be able to monitor the following indicators:

Monitoring quantitative targets, timetables and measures proposed for specific topics (biodiversity, water, human health/victims of pesticides)	Compliance articles 5-13 Baseline indicator the Commission report; with improvements/retrogres- sions charted by ongoing recording	Point 1-100 Each article max points 10 (compliance and quality) Extra 10 points for overall completion, taking into account the national situation
Pesticide use reduction	Compliance with second paragraph of article 4 and in article 15	Dynamic indicator, start- ing by looking into sales, but accompanied by measuring specific toxic pesticides
Progress on IPM	Compliance with second paragraph of article 4 and in article 15	MS could say: we are xx% of the way to achieving IPM in our vine- yards, or in arable farming, we have now rotations y% of our farms.

4.4 Future audit reports should make a simple grading of each NAP and its implementation, along these lines:

Bad situation and bad progress	Bad situation but good progress
Reasonable situation and poor progress	Reasonable situation and good progress
Good situation but poor progress	Good situation and good progress

4.3 Analysing the emergency authorisations that are provided under article 53 of regulation 1107/2009 should be automatic.

Audited Member States should be able to demonstrate the real necessity for derogation and the compliance with article 53, showing that other means to fight the pest were tested and discarded and that the situation is exceptional. Further, auditors should assess whether the audited Member States comply with

the working document SANCO/10087/2013 in terms of the completeness of the information provided and the respect of the requirements (not to repeat derogations year after year, develop research on alternatives to fight the pest, etc.)

