

STUDY SUPPORTING THE EVALUATION OF DIRECTIVE 2009/128/EC ON THE SUSTAINABLE USE OF PESTICIDES AND IMPACT ASSESSMENT OF ITS POSSIBLE REVISION

STUDY FINDINGS

AGENDA

01

OVERVIEW TO THE STUDY

02

EVALUATION FINDINGS

03

OVERVIEW OF SURVEY RESULTS FROM PPP USERS AND INDUSTRY, AND ENVIRONMENTAL NGO, CONSUMER ORGANISATIONS AND CIVIL SOCIETY

04

MAIN RESULTS FROM THE IMPACT ASSESSMENT

MENTI QUESTION



We would like to collect your views and input throughout the workshop.

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01 OVERVIEW TO THE STUDY

STUDY OVERVIEW



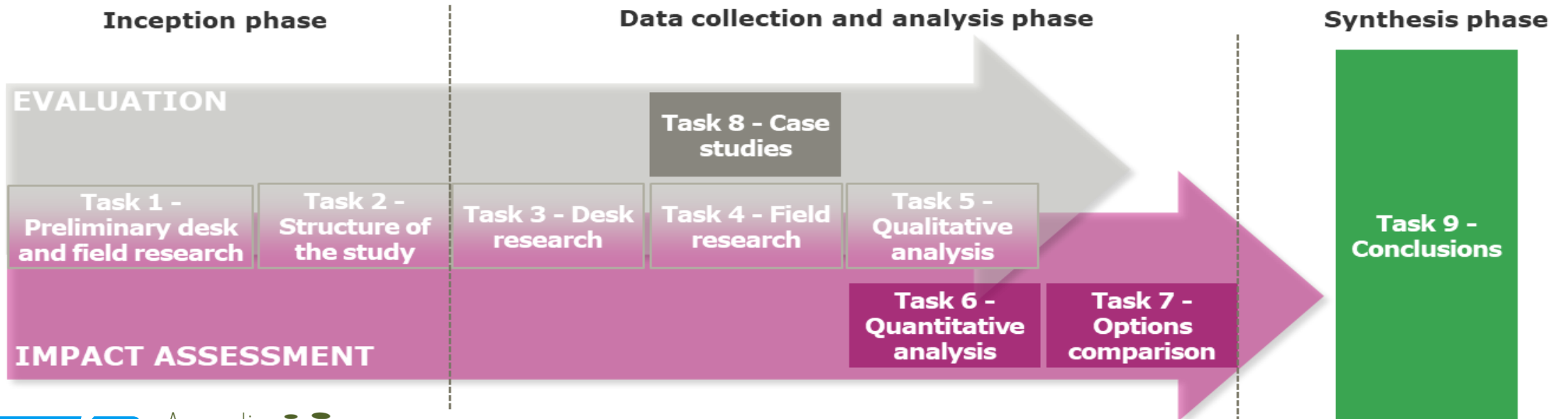
Objective

To determine whether the Directive has been performing as intended, what has worked and what has not, and **why?**



Evaluation criteria

Effectiveness, efficiency, relevance, coherence, complementary, and EU added value



STAKEHOLDER CONSULTATIONS

- Targeted interviews - 53 interviews with 82 people
- Three targeted surveys
 - Survey to 27 EU Member States, Iceland and Norway Public Authorities – 53 responses in 29 Countries
 - Survey to professional users of PPP and industry – 161 responses
 - Survey to NGOs, Consumer organisations and civil society organisations – 28 responses
- Five focus groups: environmental and human health impacts, impacts on non-EU countries, macroeconomic impacts, increasing the uptake of IPM, contribution of new technologies
- Public Consultation – 1640 respondents
- Seven case studies (Water protection, NAPs, Additional measures, Governance, IPM, Statistics, New technologies)

03 EVALUATION FINDINGS

EVALUATION PART – KEY FINDINGS

OVERARCHING CONSIDERATIONS

- Since 2011, Harmonised Risk Indicator 1 has displayed a steady reduction in the level of risk across Member States of around 20%.
 - ⚠ Note: the indicator is an index of change in type of pesticides (kg active substances) sold in Member States. It is not based on actual use or applications and does not take into account the nature of risk to human health or the environment.
- The currently available pesticide statistics however are not sufficient to effectively monitor the progress on the sustainable use of pesticides
- The polarisation of views across stakeholders presented a challenge in providing fair and evidence-based results. Differences in stakeholder positions often created diverse points of view across all of the stakeholder consultations, specifically on what the SUD has and/or should have achieved.

EVALUATION PART – KEY FINDINGS

RELEVANCE

Key evaluation question

- *To what extent are the SUD's objectives and required actions relevant today to address the current needs and problems and expected developments related to the use of pesticides in the EU?*

Main finding

- The objectives of the SUD were and still are highly relevant to address the risk posed by pesticide use to the environment and human health.
- Most of the underlying environmental and health issues and needs have remained unchanged or even been aggravated, thus underlining the relevance of a strong legislation to regulate the use of pesticides.
- A stronger awareness among consumers and society at large acts as drivers for change, however the situation is uneven among Member States.

EVALUATION PART – KEY FINDINGS

EFFECTIVENESS

Key evaluation question

- *To what extent have the actions envisaged by the SUD contributed to achieving its objectives?*

Main finding

- Several SUD provisions have been implemented in most Member States, and are likely to have contributed to a reduced risk of pesticide use, however the link to reducing the use of pesticides is unclear
- All Member States have adopted NAPs, however the level of ambition and implementation has been uneven across Member States.
- The level of implementation of IPM was not possible to establish, however evidence at the national level pointed to the SUD being effective in further raising awareness of IPM as well as boosting IPM practices.

EVALUATION PART – KEY FINDINGS

EFFICIENCY

Key evaluation question

- *Which elements of the SUD pose an administrative burden or are overly complex? What are the administrative costs for the different actors?*
- *To what extent were the SUD's costs proportionate to its benefits (i.e. positive outcomes)?*

Main finding

- The main costs from implementing the SUD have been proportionate to the likely benefits generated in terms of risk reduction.
- Likely benefits clearly outweigh the costs of the SUD. Identified benefits pertain to the environment and society at large, in particular health and environmental benefits.
- The direct costs of SUD implementation mainly fall on the professional users of pesticides, in particular farmers, who have little or no direct economic benefit to comply with SUD provisions.

EVALUATION PART – KEY FINDINGS

COHERENCE AND COMPLEMENTARITY

Key evaluation question

- *To what extent has the SUD created an effective and coherent link with other EU legislation and policies related to the use of pesticides?*
- *To which extent is the SUD dependent on implementation of the linked legislation in achieving its objectives?*

Main finding

- The internal and external coherence of the Directive is generally strong and there are no major inconsistencies or overlaps.
- The theoretical link between the SUD and the CAP is strong, but in practice, weak, and the CAP has not been considered as a key tool to support the implementation of the Directive, and particularly IPM.
- The SUD is complementary to other pieces of EU legislation however, the complementarities have not been fully realised.

EVALUATION PART – KEY FINDINGS

EU ADDED VALUE

Key evaluation question

- *To what extent has the SUD produced additional value compared to what could have been produced at national or regional level in its absence?*
- *To which extent did the SUD strike the right balance between action at EU level and national action? Is it a proportionate response to the problem?*

Main finding

- While previous measures existed at Member States level, they were varied and not harmonised across the EU.
- The objectives and concept of the SUD has provided added value by creating a common, harmonised framework for the sustainable use of pesticides and raising awareness.
- The implementation of these elements, however, needs to further progress in order to provide added value comprehensively across the EU.

EVALUATION PART – ADDITIONAL CONSIDERATIONS

NON-EU COUNTRIES

Key evaluation question

- *To what extent has the SUD allowed for coordination and complementarity with other EU actions and policies on [...] food and nutrition security in developing countries including sanitary and phytosanitary support (SPS) to the agri-food sector in third countries?*

Main finding/consideration for the IA

- The SUD has little to no direct impact on food production in non-EU countries, but EU pesticide legislation in general, (including the SUD) is used internationally as an example.
- The spill over of sustainable practices and low risk alternatives has been limited by the differing uptake in the EU.
- The SUD has the potential to promote the development of low-risk alternatives, which can also be used in non-EU production

MENTI QUESTIONS



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At this stage, we would appreciate your input on the question below:

- Would you like to share any reactions to the evaluation findings?

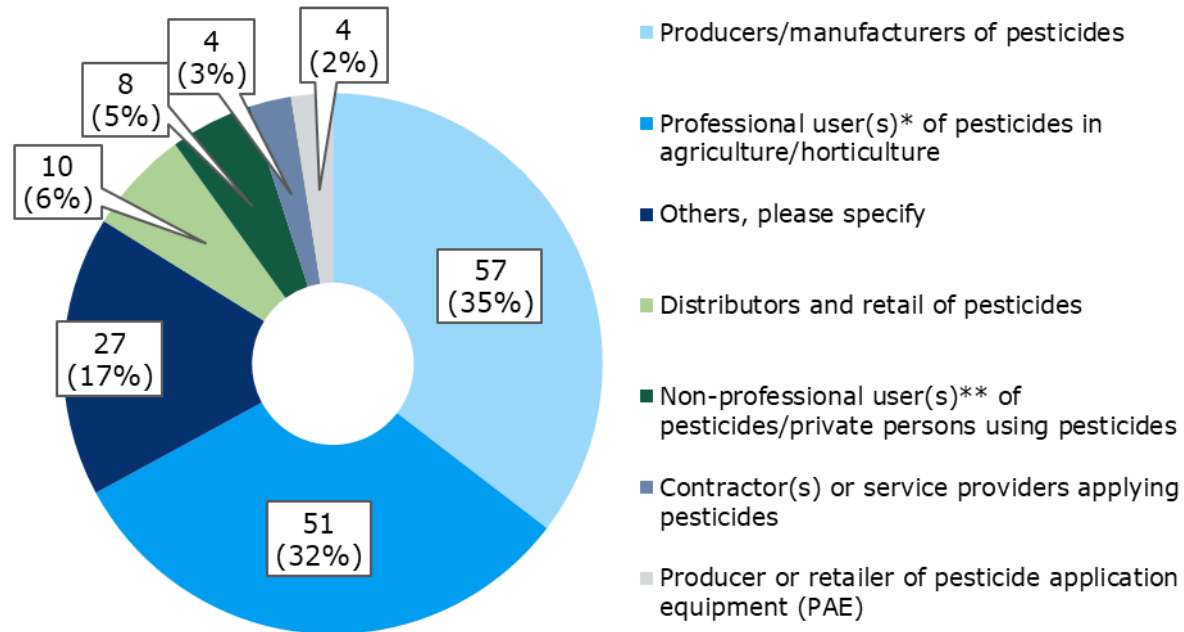
02

Overview of survey results from PPP users and industry, and environmental NGO, consumer organisations and civil society

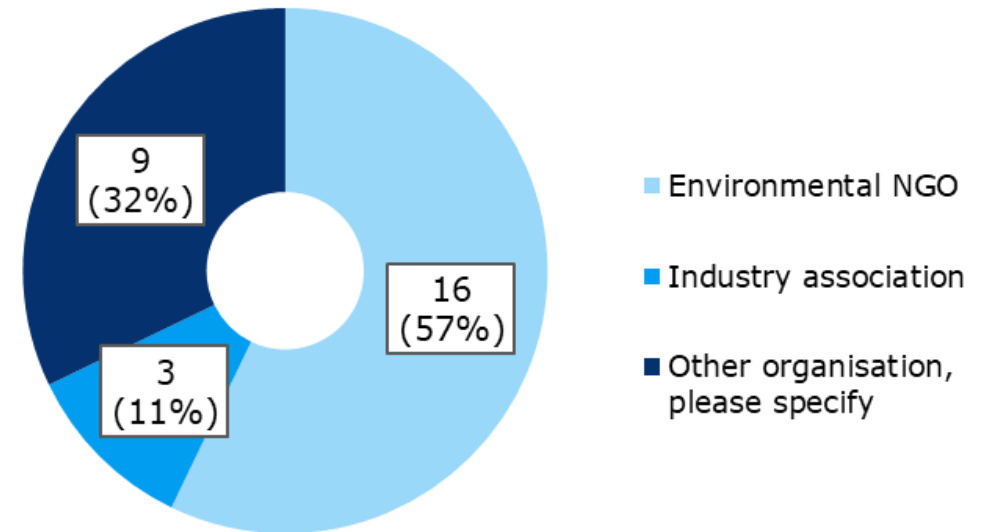
RESPONDENT PROFILES

- **PPP Users and industry survey:** Overall 161 responses from 21 Member States, Switzerland and Turkey
- **Environmental NGOs survey:** 28 responses from 9 Member States plus the UK

Survey to PPP users and industry



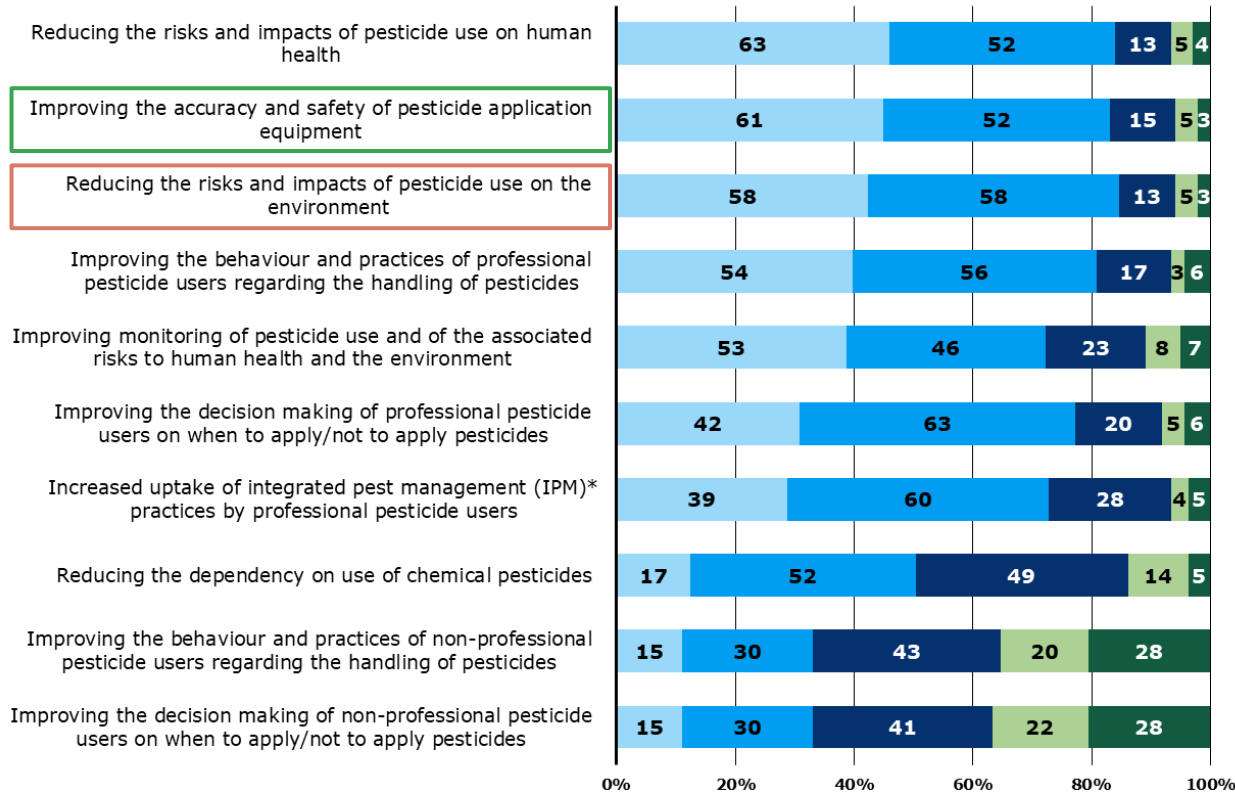
Survey to Environmental NGOs, consumer and civil society organisations



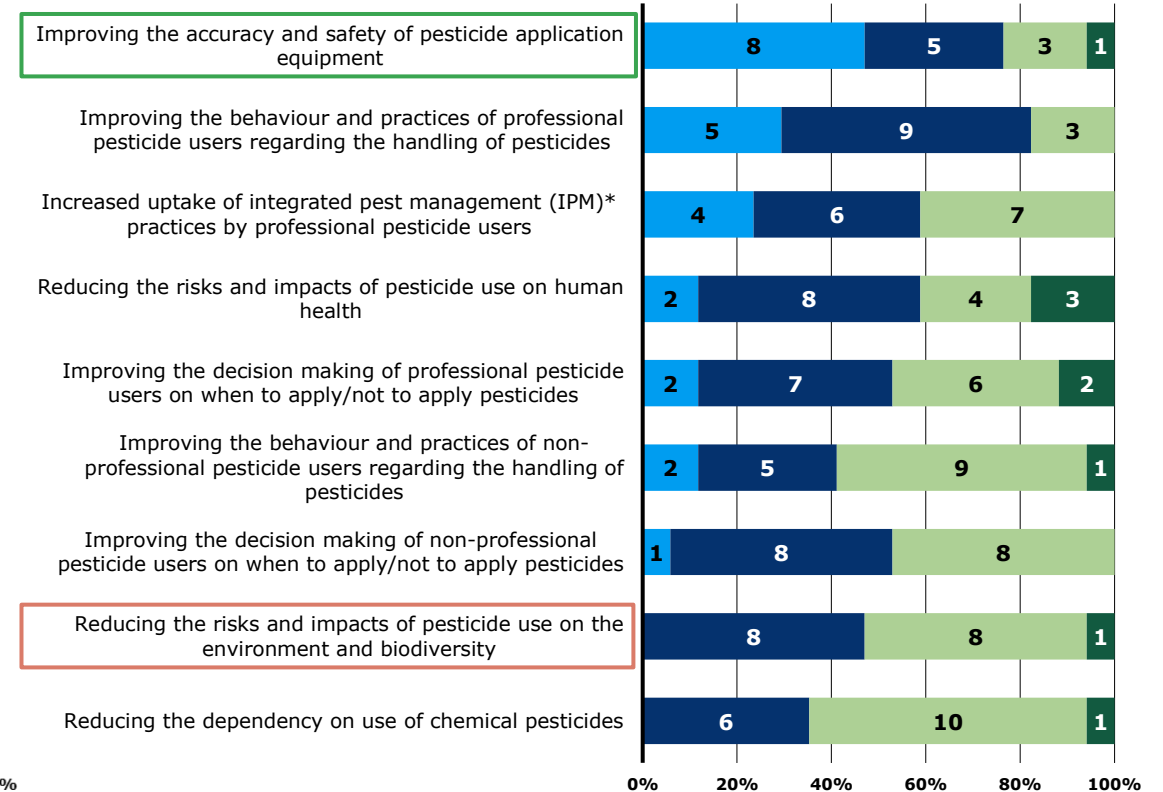
CONTRIBUTION OF THE SUD

To what extent has the SUD contributed to the following objectives in your COUNTRY?

Survey to PPP users and industry (n=136)



Survey to Environmental NGOs, consumer and civil society organisations (n=17)



■ To a major extent ■ To a moderate extent ■ To a minor extent ■ Not at all ■ Do not know/not relevant

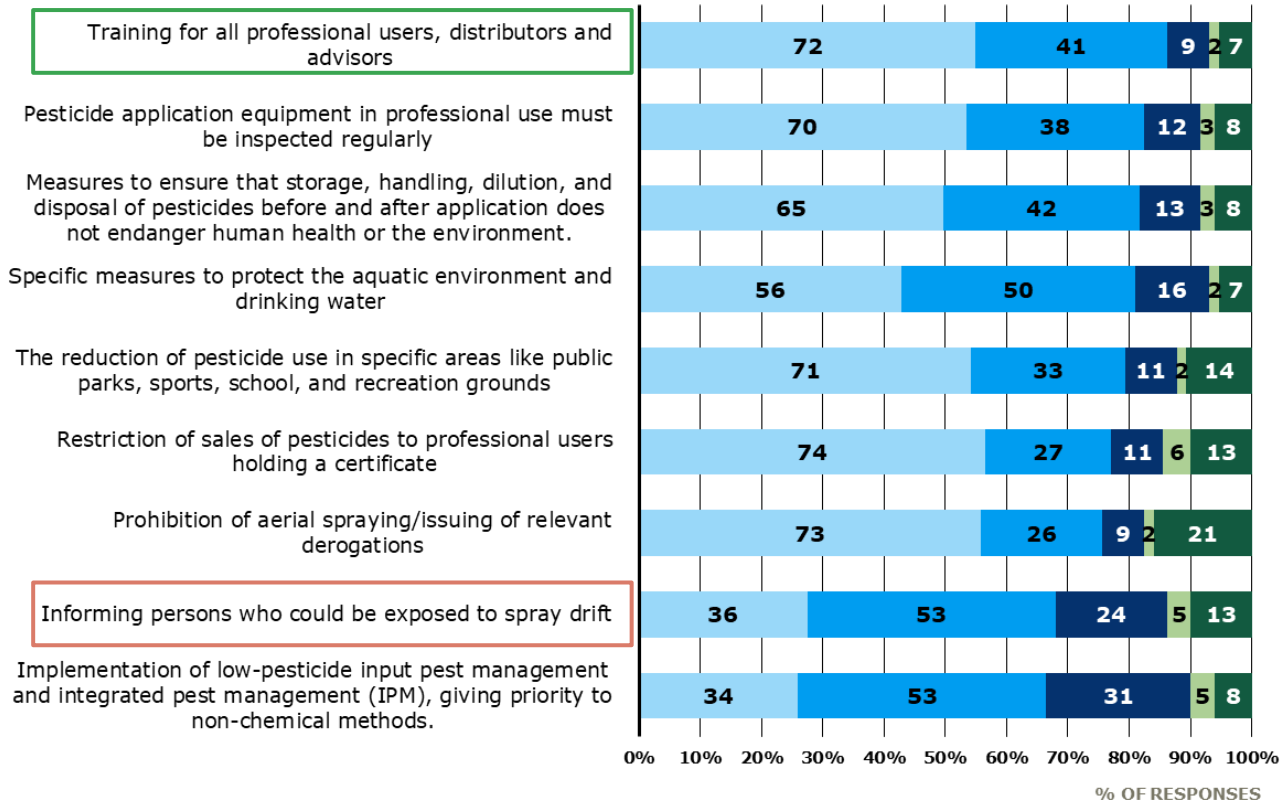


Similarities Divergence

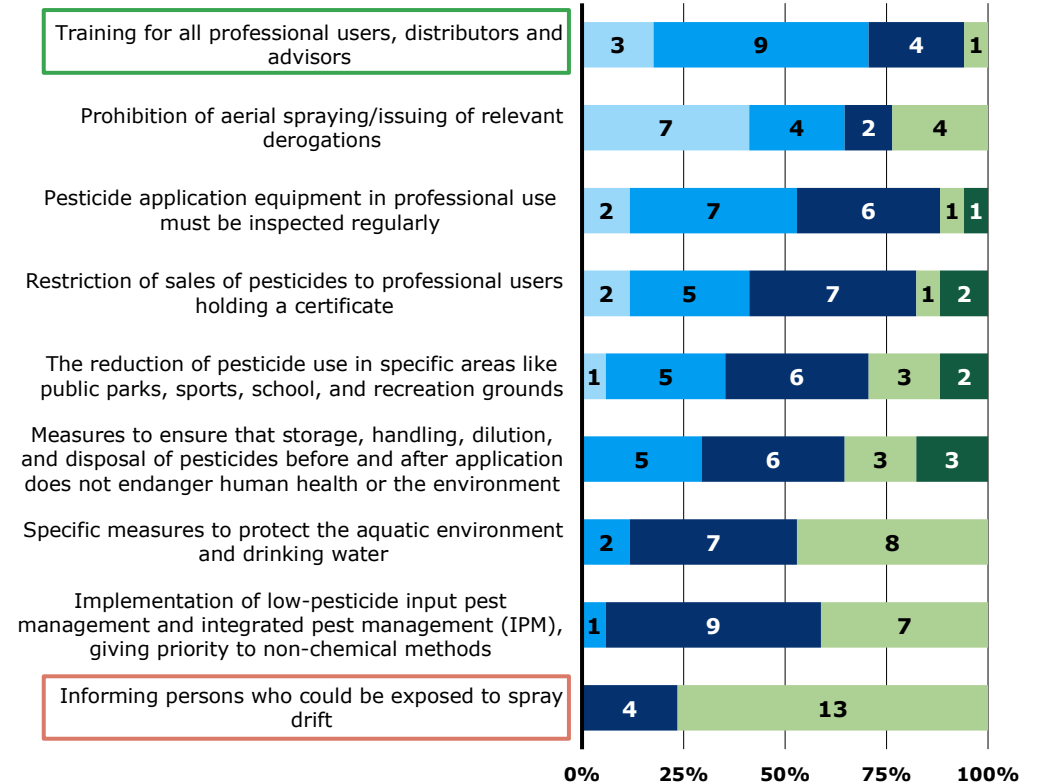
IMPLEMENTATION OF THE SUD

To what extent are the following elements of the current SUD actually being implemented in your COUNTRY?

Survey to PPP users and industry (n=131)



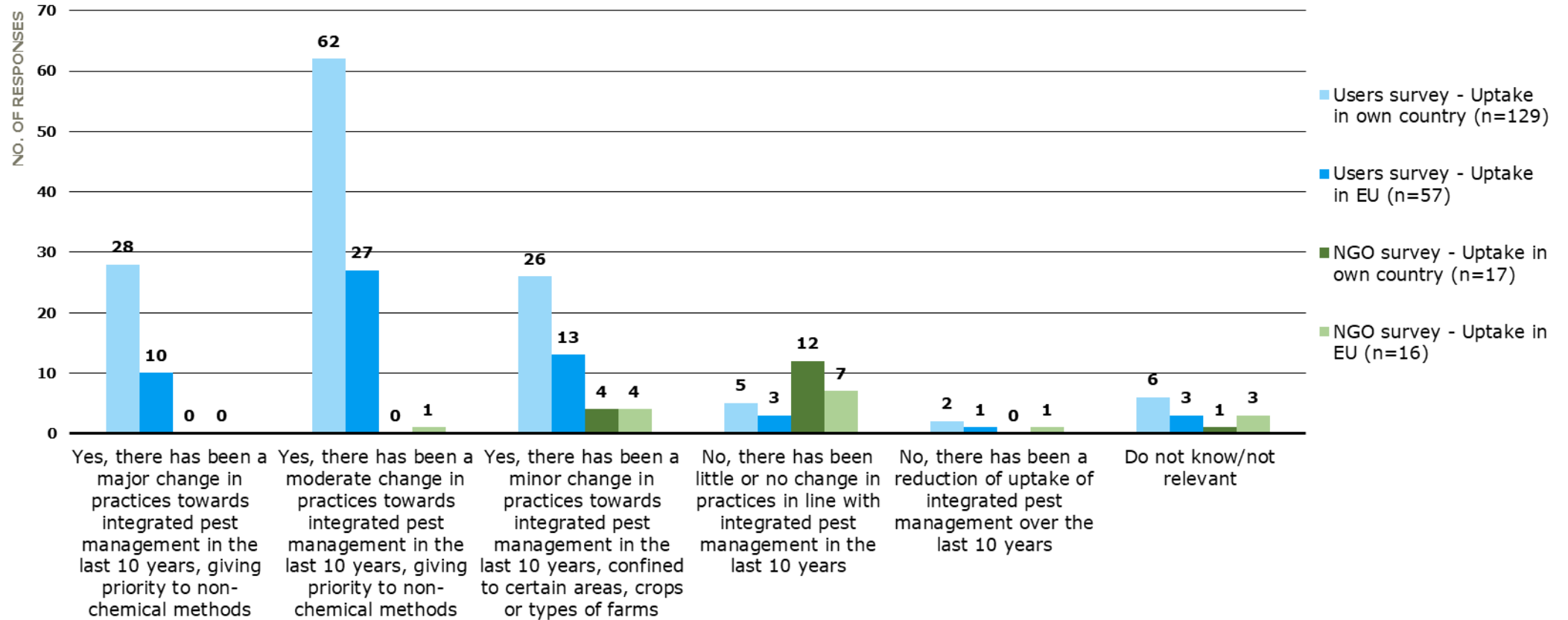
Survey to Environmental NGOs, consumer and civil society organisations (n=17)



■ To a major extent ■ To a moderate extent ■ To a minor extent ■ Not at all ■ Do not know/not relevant

UPTAKE OF IPM

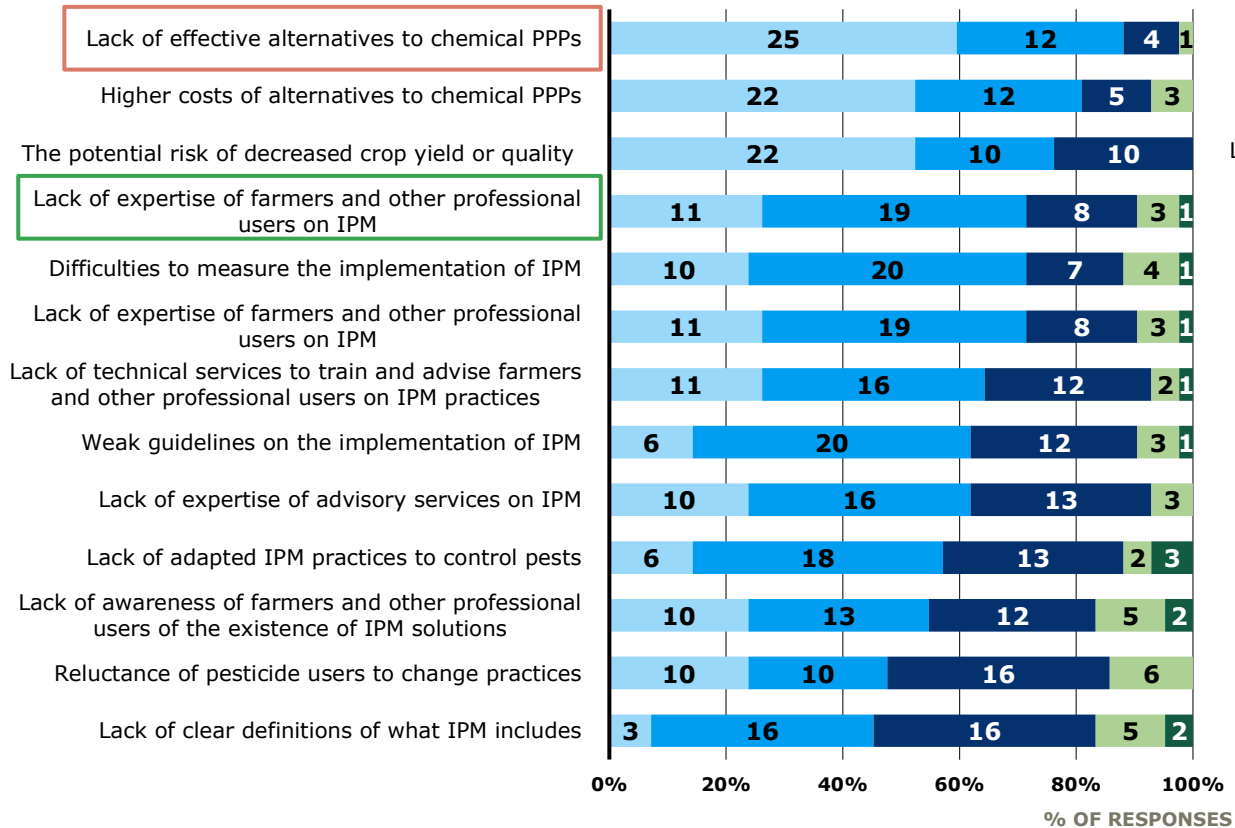
In your view, did the SUD lead to an increase of uptake of integrated pest management in your country/ in the EU?



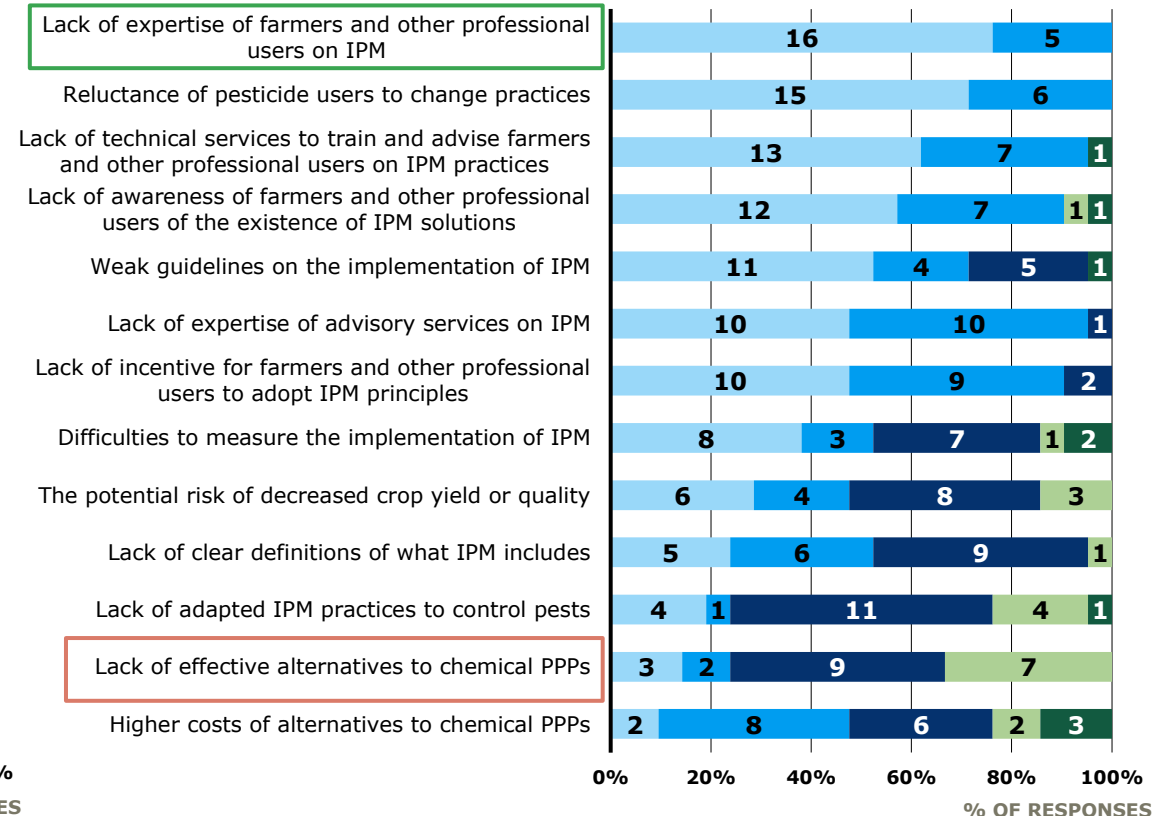
CHALLENGES IN IMPLEMENTING IPM

In your opinion, to what extent are the following factors barriers or obstacles to the uptake of IPM practices?

Survey to PPP users and industry (n=42)



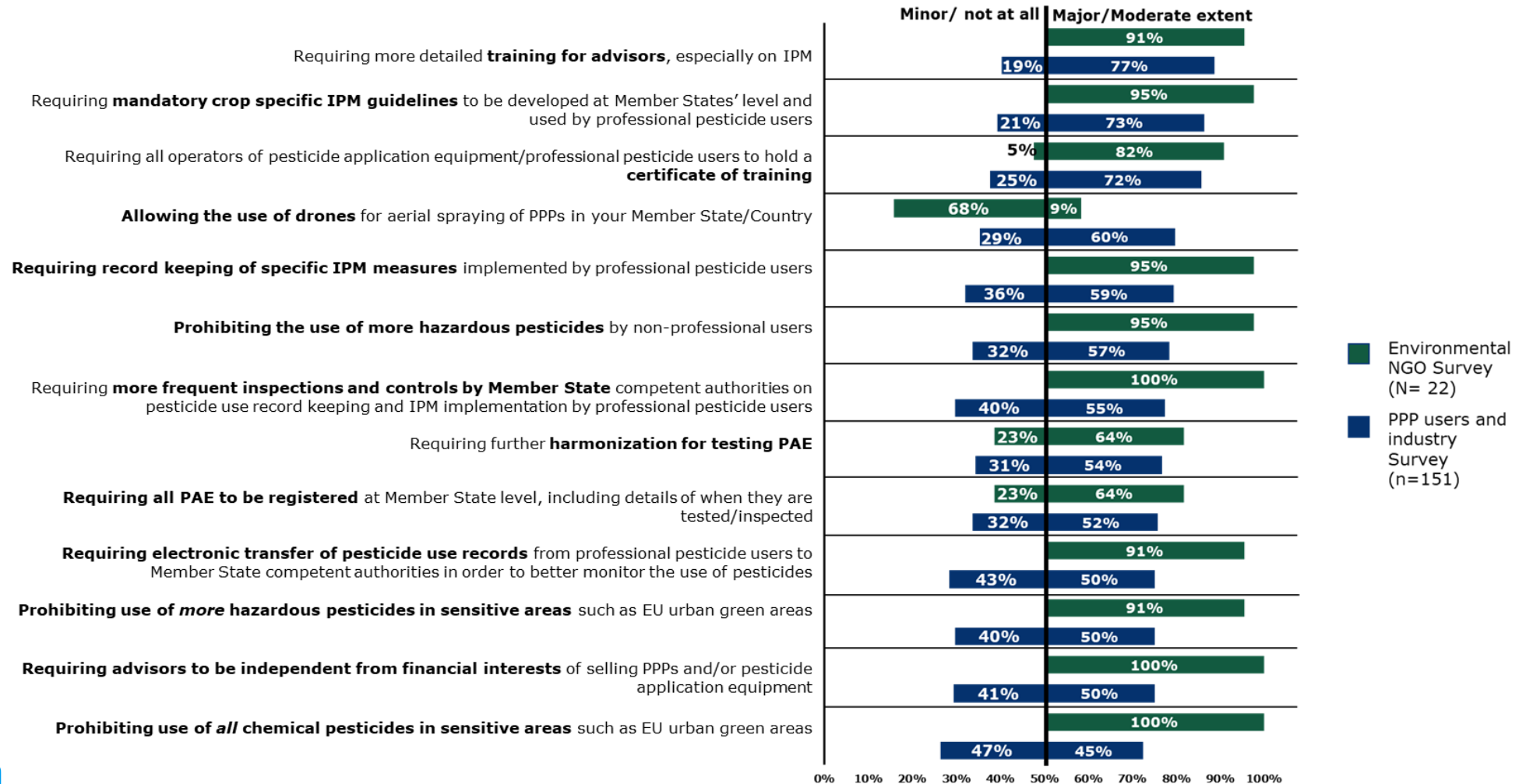
Survey to Environmental NGOs, consumer and civil society organisations (n=21)



■ To a major extent ■ To a moderate extent ■ To a minor extent ■ Not at all ■ Do not know/not relevant

MEETING THE FARM TO FORK TARGETS

In your opinion, to what extent would the following changes lead to a reduced use and risk of chemical pesticides, in line with the targets announced in the Farm to Fork strategy?

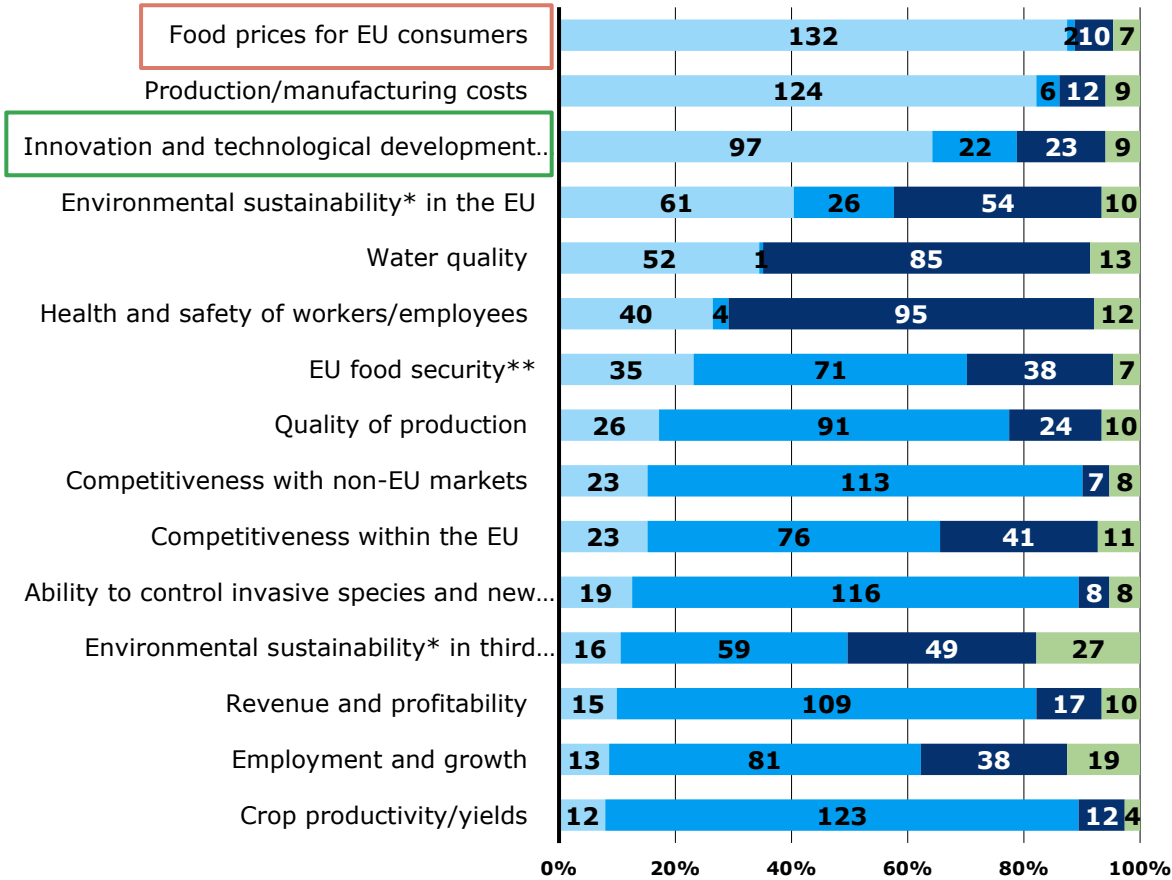


Note: "Do not know" options were not included in the graph

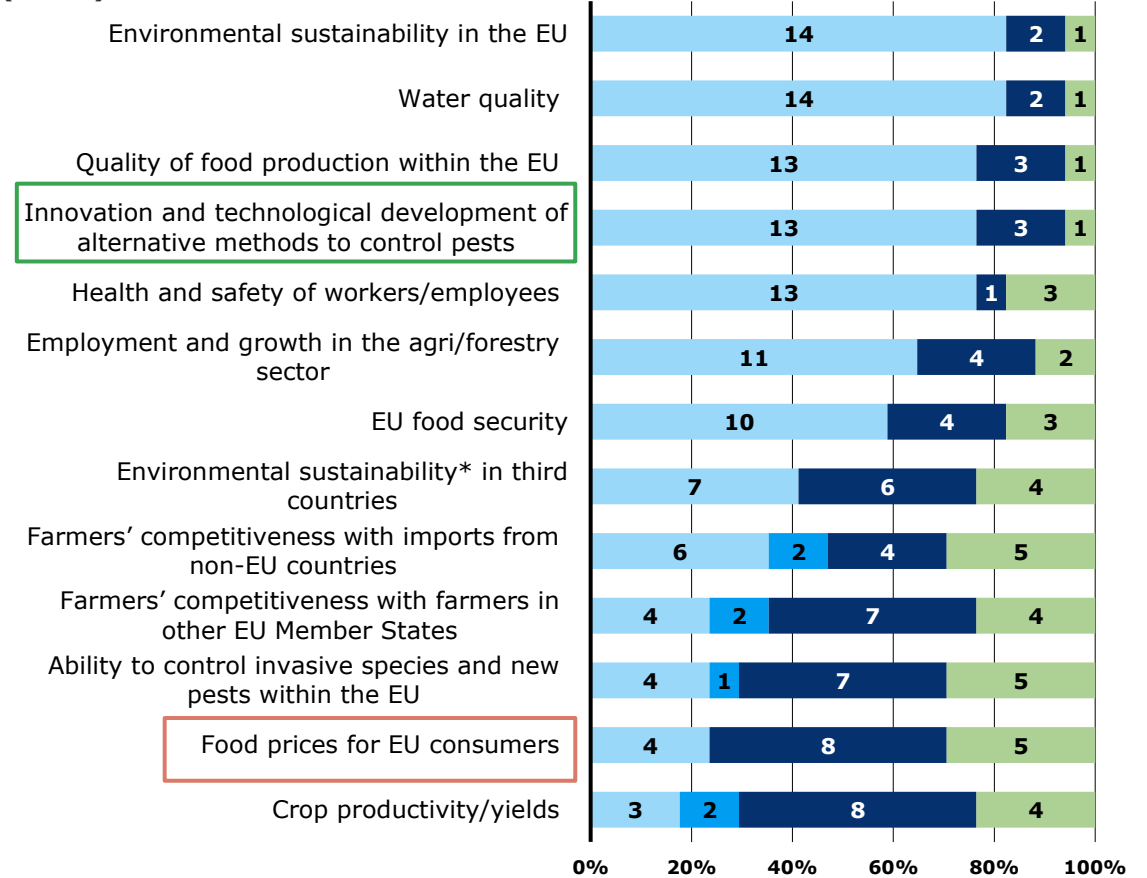
IMPACT OF MEETING THE FARM TO FORK TARGETS

In your opinion, what would be the likely impact of meeting the Farm to Fork pesticide use and risk targets in your field of activity/ your country?

Survey to PPP users and industry (n=151)



Survey to Environmental NGOs, consumer and civil society organisations (n=17)



■ Increase ■ Decrease ■ No change ■ Do not know/ not relevant

Similarities Divergence

MENTI QUESTIONS



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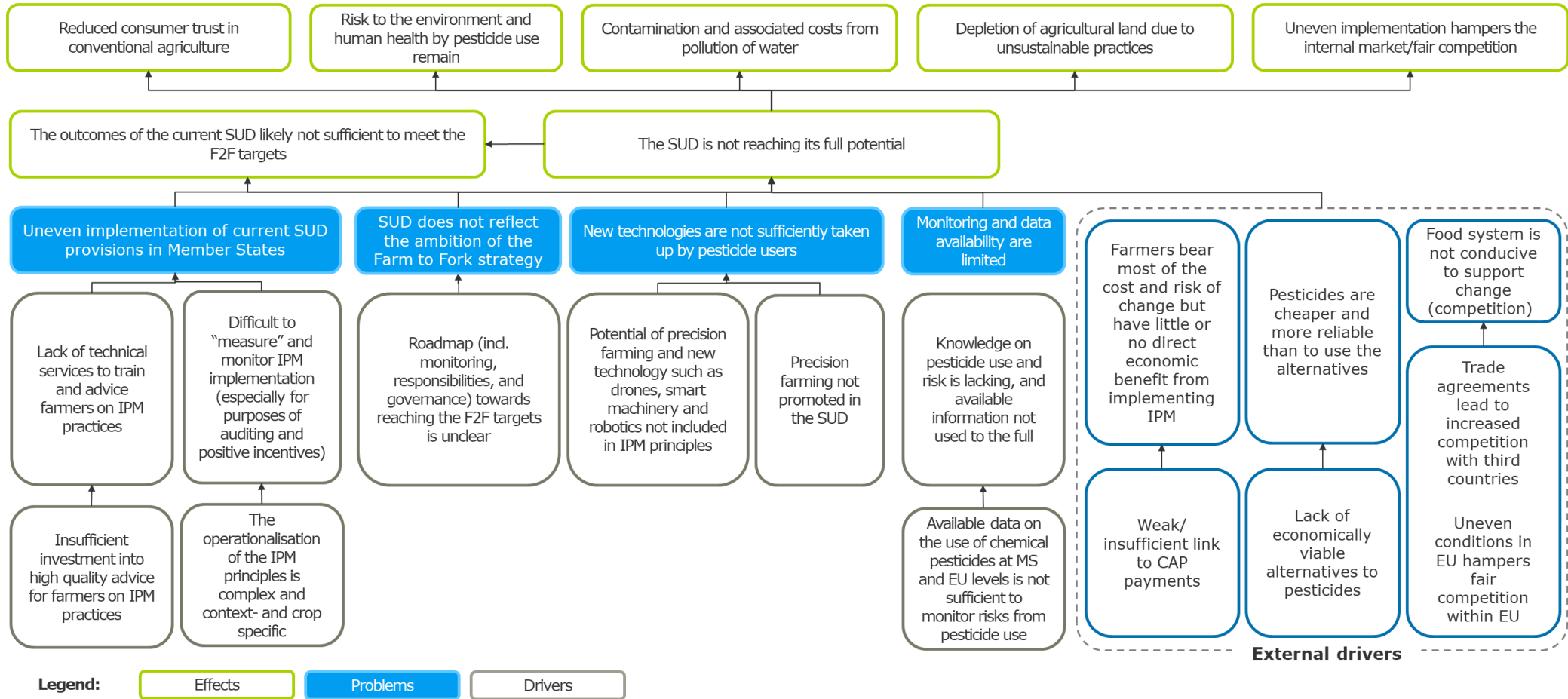
At this stage, we would appreciate your input on the two questions below:

- Are there any elements of the survey responses that come as a surprise to you?
- What other reflections do you have on the survey results?

04 MAIN RESULTS FROM THE IMPACT ASSESSMENT

IMPACT ASSESSMENT – MAIN FINDINGS

PROBLEM ANALYSIS



IMPACT ASSESSMENT – MAIN FINDINGS

ASSESS EU ADDED VALUE



Continued need for intervention due to transnational aspects and subsidiarity

- Divergence of measures taken in and between Member States would lead to different levels of protection of health and environment and diverging conditions for the main users of pesticides. This goes against one of the fundamental objectives of the Treaty on the Functioning of the European Union, thus requiring intervention.
- If the problem(s) related to sustainable use of pesticides is left only to Member States, the current differences will remain or intensify, driven mainly by political will, the market drivers and public opinion/consumer attitudes.

Benefits from action at EU level

- The promotion of a sustainable use of pesticides across the EU, which reduces the risks to human health and the environment and to support a level playing field on the internal market provides clear EU added value.

IMPACT ASSESSMENT – MAIN FINDINGS

ANALYSIS OF IMPACTS



Two levels of assessment

Level 1

Assessment of social, macroeconomic and environmental impacts of the Farm to Fork pesticide targets

Level 2

Assessment of the policy options for the revision of the SUD

1. ASSESSMENT OF LIKELY SOCIAL, MACROECONOMIC AND ENVIRONMENTAL IMPACTS OF THE FARM TO FORK PESTICIDE TARGETS – OVERVIEW



The baseline and assessment was developed taking into account:

1. On the main external drivers (policy, environmental, social and economic) that will likely influence the sustainable use of pesticides until 2030, and
2. An assessment of the likely development on the established risk indicators of SUD and the F2F pesticide reduction targets.
3. No change scenario on the main indicators

Environmental Indicators

- Biodiversity and landscapes
- Soil quality
- Water quality
- Pollination services
- Natural pest control

Economic Indicators

- Impacts on farm profitability and productivity
- Impacts on PPP value chain
- Impacts on Agri-Food Value chain
- Trade Impacts

Social Indicators

- Exposure by consumers through pesticide residues in food and beverages
- Exposure by pesticide users from pesticide handling and application
- Exposure by bystanders from pesticide application
- Impact on diets and nutrition

APPROACH TO THE ASSESSMENT OF FARM TO FORK PESTICIDE TARGETS

- Review of state-of-the-art literature on environmental, social and economic impacts of pesticide use
- Generation of new evidence is outside of the scope of this IA, and it mainly relies on the existing body of data sources (i.e., literature review, focus groups, case studies)
- Some key studies:
 - JRC, 2021: Modelling environmental and climate ambition in the agricultural sector with the CAPRI model
 - COCERAL & Unistock, 2021: Impact of the Farm to Fork targets on the Cereals and Oilseeds markets
 - USDA, 2020: Economic and Food Security Impact of Agricultural Inputs Reduction Under the European Union Green Deal's Farm to Fork and Biodiversity Strategies
 - EU Commission: EU agricultural outlook for markets, income and environment 2020-2030
 - Guyomard, H., Bureau J.-C, 2020: The Green Deal and the CAP: policy implications to adapt farming practices and to preserve the EU's natural resources

IMPACT ASSESSMENT – MAIN FINDINGS

EC PROPOSED POSSIBLE OPTIONS FOR ASSESSMENT



- 1. Aligning with pesticide-related targets announced in the Farm to Fork Strategy:** Align SUD with F2F targets and limit use and risks from pesticides, particularly more hazardous ones.
- 2. Strengthening current provisions:** Options on improving practical the implementation and operationalisation of IPM principles, improving uptake of SUD provisions, strengthening the effectiveness of the NAPs and improving the expertise of pesticide users
- 3. Strengthening data availability and monitoring:** Monitoring the use as well as the risk of use from pesticides and use the information for policy development at Member State and EU level.
- 4. Accounting for new technologies:** Promote precision farming and the development of alternatives to chemical pesticides through the SUD, account for drones in the SUD and revise SUD provisions to account for emerging technologies and techniques

2. ASSESSMENT OF IMPACTS FROM POLICY OPTIONS ADDRESSING ALIGNMENT WITH PESTICIDE-RELATED TARGETS ANNOUNCED IN THE FARM TO FORK STRATEGY



OPTIONS ALIGNING WITH F2F TARGETS

- **[LA] The two F2F targets remain aspirational:** No foreseen additional costs for PPP users, minor additional costs for national authorities and direct medium costs for EU institutions
- **[MEA] The two F2F targets are included in a revised SUD as mandatory targets to be achieved at overall EU level:** Medium to high costs for national authorities. Not possible to estimate costs for EU institutions and PPP users
- **[MA] The two F2F targets are included in EU legislation as mandatory targets addressed to MSs to be achieved at overall EU and individual MS levels:** Medium to high costs for national authorities. Not possible to estimate costs for PPP users. There could be reduced additional costs.

OPTIONS TO REDUCE USE OF MORE HAZARDOUS PESTICIDES

- **[LA] Prohibit purchase and use of more hazardous pesticides by non-professional users:** Reduced risk for human exposure, additional control burden for public authorities.
- **[MEA] to prohibit the use of more hazardous pesticides in sensitive areas such as urban green areas:** Potential for environmental benefits through a reduction of risk. Reduction of exposure of vulnerable groups and valuable ecosystems.
- **[MEA] A prescription system for the purchase by professional users of more hazardous pesticides and Prohibit use of more hazardous pesticides in sensitive areas such as urban green areas:** Medium to high costs of PPP users, medium costs for national authorities. Potential for environmental benefits through a reduction of risk. Reduction of exposure of vulnerable groups and valuable ecosystems.

LA: Least ambition, MEA: Medium ambition, MA: Most ambition

MENTI QUESTION



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At this stage, we would appreciate your input on the following question:

- What are your reflections on the assessment of options for alignment with the pesticide targets of the Farm to Fork Strategy?

2. ASSESSMENT OF IMPACTS FROM POLICY OPTIONS

STRENGTHENING CURRENT SUD PROVISIONS



IPM

- **[LA] Current IPM principles in annex to SUD clarified and reworded:** Not possible to estimate direct economic costs to stakeholders, however assumption for there to be low costs. Increased uptake of IPM practices are assumed to lead to environmental and health benefits.
- **[LA] Requirement for MS to establish tailored IPM guidance (region/crop specific):** Medium to high direct economic costs for national authorities and assumption for low costs for PPP users.
- **[LA] Further emphasise the current SUD compulsory requirement for MS to introduce incentives for the use of non-chemical pest control alternatives and methods:** Potential one off costs for national authorities with potential environmental and social benefits if IPM uptake is increased.
- **[MEA] Establish mandatory common framework for electronic IPM record keeping:** Low to medium direct economic costs for PPP users and national authorities with low costs for EU institutions. In-direct environmental and health benefits.
- **[MA] Use mandatory crop-specific IPM standards as a basis for controls and enforcement + record keeping option:** Low costs for PPP users and low to medium direct economic costs for national authorities.

2. ASSESSMENT OF IMPACTS FROM POLICY OPTIONS

STRENGTHENING CURRENT SUD PROVISIONS



NAPs

- **[LA] Legislation provides for more specificity as to what is included in NAP and Commission takes stronger line in enforcement:** Additional low-medium costs could arise for national authorities with only minor costs for EU institutions. Unclear environmental and social benefits.
- **[MEA] Template provided on NAP structure and improved Commission guidance on NAP reporting, including reduction of use and risk for health and environment:** Need for a revision of many NAPs. Unclear environmental and social benefits.
- **[MEA] Reporting on NAPs has to take place annually, including monitoring progress related to F2F targets and outcome of HRI trends:** Unclear direct costs to PPP users but assumed low, low to medium costs for national authorities. In-direct environmental and social benefits if NAPs implemented.

2. ASSESSMENT OF IMPACTS FROM POLICY OPTIONS

STRENGTHENING CURRENT SUD PROVISIONS



Training

- **[LA] All operators of PAE to hold a certificate of training instead of the current requirement that only the purchaser of the pesticides be trained:** No additional environmental or social benefits observed. No additional costs for PPP users or national authorities found.
- **[LA] Introduce a legal requirement for more detailed training and holding of a relevant certificate for all advisors (linked to IPM):** Potential reduced direct economic costs for PPP users, low to medium costs for national authorities.
- **[MEA] Strengthened role and rules for independent advisory service to professional pesticide users + legal training requirement option (linked to IPM):** Medium to high direct economic costs to PPP users and high costs to national authorities.

2. ASSESSMENT OF IMPACTS FROM POLICY OPTIONS

STRENGTHENING CURRENT SUD PROVISIONS



Testing of PAE

- **[LA] Further promote guidelines, harmonised methodology where CEN standards exist and stimulate knowledge sharing among Member States:** Low direct economic costs for national authorities and EU institutions. Low to medium costs for PPP users. Great importance to ensure environmental and social benefits
- **[LA] Introduce a requirement for PAE to be registered to facilitate more effective monitoring of PAE:** Medium to high direct economic costs to PPP users and high costs to national authorities.
- **[MEA] Require all new PAE to be tested and certified latest between 6 and 12 months after purchase:** Low direct economic costs for PPP users. No considerable costs were foreseen for national authorities and EU institutions compared to current costs. Potential for environmental and human benefits
- **[MEA] Commission supports drift technology reduction tests, aiming to promote a more harmonised approach at EU level,** the application of best available technologies (BATs) and the development of standards for PAE: Assessment pending

MENTI QUESTION



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At this stage, we would appreciate your input on the following question:

- What are your reflections on the assessment of options to strengthen the current SUD provisions?

2. ASSESSMENT OF IMPACTS FROM POLICY OPTIONS ADDRESSING DATA AVAILABILITY AND MONITORING



- **[LA] Mandatory collection by MS of information on acute and chronic poisoning:** Impact could entail increased health benefits, however environmental benefits unclear. No additional direct economic costs for PPP users or EU institutions. Low to medium costs for national authorities.
- **[LA] MS to submit to the Commission and share information on current national health and environment monitoring indicators concerning the use and risk of pesticides:** Minor direct economic costs for all stakeholders.
- **[MEA] Oblige MS to collect in electronic manner and analyse the existing pesticide use data currently held by pesticide users under Article 67 of Reg. 1107/2009 and report on this and progress towards reaching the F2F pesticide use and risk targets:** Low to medium costs for PPP users, medium to high costs for national authorities (depending on whether existing system is in place) and minor costs for EU institutions. In-direct benefits on the environment and society/ human health.
- **[MEA] Combination of options including an option for the Commission to propose in the longer term, specific harmonised indicators:** Minor costs for PPP users and national authorities with no direct costs foreseen for the EU institutions.

MENTI QUESTION



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At this stage, we would appreciate your input on the following question:

- What are your reflections on the assessment of options to address data availability and monitoring?

2. ASSESSMENT OF IMPACTS FROM POLICY OPTIONS ADDRESSING NEW TECHNOLOGIES



Precision farming

- **[LA] Commission and MS to promote targeted training and advice measures for precision farming to have an efficient uptake from professional pesticide users:** If precision farming materialises as a result then environmental and human benefits are expected. Direct economic costs for stakeholders is unclear but assumed minimal.
- **[LA] Commission and MS to promote the use of forecasting tools and prediction models and the development of alternative methods that can help to reduce the use and risk of pesticides:** If such techniques materialise as a result, environmental and human benefits are expected. Direct economic costs for stakeholders are unclear but assumed minimal.
- **[LA] Current IPM principles in annex to SUD clarified and reworded for example to fully reflect the potential of precision farming and new technology such as drones, smart machinery and robotics to reduce the use and risk of pesticides:** It can be expected that the uptake of technologies would lead to a decrease of use and risk of use of pesticides but the extent of this depends on the technologies. It is not possible to estimate the direct economic impacts for stakeholders.

2. ASSESSMENT OF IMPACTS FROM POLICY OPTIONS ADDRESSING NEW TECHNOLOGIES



Drones

- **[LA] Clarify that definition of aerial spraying includes spraying by drones:** No additional costs, mainly a no-change situation with legal clarification.
- **[MEA] Within certain parameters, to be defined in a future legislative Annex, no derogation will be required for aerial spraying by drones:** Some additional costs for European institutions and potentially industry (to establish criteria and norms/standards). Potential health benefits to pesticide users due to less exposure. Unclear environmental benefits (evidence still uncertain), may enable a use reduction through more targeted treatment.
- **[MA] Any type of spraying (including aerial spraying) is allowed without prohibition and without derogation if the spraying instrument is less than 2 metres from the crop being sprayed:** Similar the MEA assessment.
- **[MA] Commission could adopt a delegating act to account for future technological progress:** Similar to the MEA assessment

MENTI QUESTION



Return to your menti window or go to **menti.com** and enter the code **5841 9237**

At this stage, we would appreciate your input on the following question:

- What are your reflections on the assessment of options to address new technology?

MENTI QUESTIONS



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Finally, we would like to ask you a few last questions:

- Would you like to share any additional comments?

Bright ideas. Sustainable change.

