

Afternoon session: Political recommendations on IPM

Opening address:

The significance of incorporating a strong IPM as a crucial element within the post-2027 CAP

Janusz Wojciechowski, Former European Commissioner for Agriculture and Food, Poland

Quantification of the actual deployment of practices and systems and the potential acreage of implementation

Coordinator: Professor Giovanni Dinelli
Prof. Francesco Spinelli, Dr. Giovanni Mian, Dr. Camilla Tibaldi
University of Bologna



Objectives of Task 3.1



Why Assess IPM Implementation in Europe?

- Integrated Pest Management (IPM) is a cornerstone of sustainable agriculture under the EU Green Deal and Farm to Fork Strategy.
- Despite EU-wide frameworks, IPM definition varies among EU Member States.
- **AGROWISE project was created** to fill this gap with evidence, data, and guidelines.
- **Task 3.1** aimed to **assess the current state of IPM implementation** across EU MS to:

1

Provide a picture of the actual deployment of IPM practices and their respective level of adoption across MS, based on the 8 principles of IPM.

2

Estimation of potential acreage for the implementation of the 8 IPM principles, using expert assessments and national agricultural databases

3

Identify the evidence of the implementation of these practices to strengthen the knowledge on IPM national guidelines across Member State

Key results: Current Deployment

Heatmap on % of IPM adoption based on the **Taxonomy Layer 2** (first discrepancies level). The table includes both compulsory and optional measures. Thus, it does not strictly indicate that a single practice is adopted. This provided a comparative overview of the IPM measures across the eight EU Member States participating to Agrowise.

MAIN PRACTICE	TAXONOMY LAYER 1	TAXONOMY LAYER 2	% OF ADOPTION
1. Prevention And Suppression	1.1 Crop Selection	1.1.1 Cultivar And Rootstock Diversity	100%
		1.1.2 Crop Species Diversity	100%
		1.1.3 Adaptation To Site Conditions	100%
		1.1.4 Seed/Planting Materials	100%
	1.2 Crop Establishment	1.2.1 Sowing	75%
		1.2.2 Planting (Cuttings/Seedlings)	25%
	1.3 Cultivation Techniques	1.3.1 Soil Cultivation	50%
		1.3.2 Crop management	50%
		1.3.3 Harvest Management	63%
	1.4 Amendments	1.4.1 Suppressive Amendments	50%
		1.4.2. Balanced fertilisation	75%
		1.4.3 Ph Management	50%
		1.4.4 Water Management	50%
	1.5 Increase of natural regulation	1.5.1 Management Of Ecological Infrastructure	75%
		1.5.2 Management Of Resources To The Pest (landscape)	63%
2. Monitoring	2.1 Monitoring	1.6.1 Cleaning Of Machinery And Equipment	75%
		1.6.2 Management Of Resources To The Pest (materials in field)	50%
		1.6.3 Soil Disinfection	75%
3. Decision making	3.1 Decision Support Systems & Thresholds	2.1.1 Monitoring	88%
		2.1.2 Assessment	75%
		2.1.3 Prognosis and forecast	63%
4. Biological, physical and other non chemical methods	4.1. Biological Control	3.1.1 Prediction And Warning (Seasonal)	63%
		3.1.2 Predictive Farm Systems (Long Term/Systemic)	75%
	4.2 Biotechnical Control	3.1.3 Thresholds	75%
		4.1.1 Supplemental Release Of Live Beneficials	25%
		4.2.1 Attractants And Repellents (natural)	63%
		4.2.2 Attractants and repellents (other)	63%
	4.3 Physical Control and mechanical	4.2.3 Stimulation And Interference	50%
		4.2.4 Engineering of biocontrol agents	75%
		4.3.1 Barriers	38%
		4.3.2 Thermal Control (Excluding Thermal Seed Treatment)	38%
5. Pesticide Selection	5.1 Pesticide Selection	4.3.3 Mechanical removal of pests	88%
		4.3.4 Visual Attractant	75%
6. Reduced Pesticide Use	6.1 Reduced Pesticide Use	4.4.1 Natural Substances	75%
		5.1.1 Pesticide Selection	38%
7. Anti-resistance strategies	7.1 Pesticide Selection	6.1.1 Adapting Spraying Technology	63%
		6.1.2 Spray Application	50%
8. Evaluation	8.1. Documentation And Reporting	7.1.1 Choice Of Active Substance And Control Agent	63%
		8.1.1 Record Keeping	63%
		8.1.2 Reporting Systems	75%
	8.2 Impact Assessment	8.2.1 Efficacy Evaluation	38%
		8.2.2 Environmental Assessment	63%
		8.2.3 Societal Assessment	75%
		8.2.4 Economic Assessment	75%

Strong heterogeneity in IPM implementation across Member States.

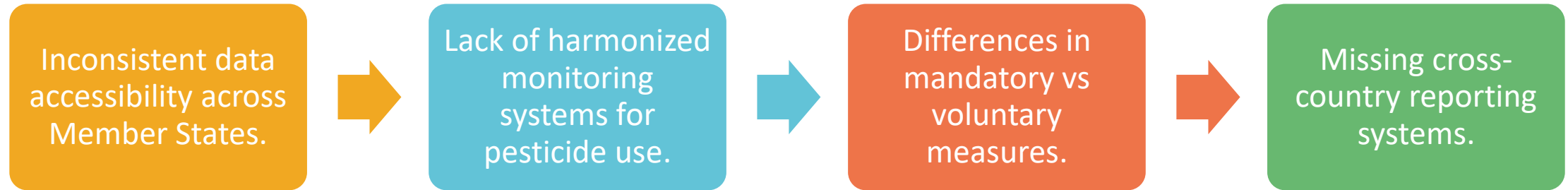
Data collection is fragmented and often incomplete.

Key results: Estimation of the Acreage

Country	Surface supporting the IPM (Million Ha)	Explanation of the entered value
Italy	9,91	Value obtained with the sum of Regional surfaces present in the retruale.it website
Germany	6,70	Value obtained by difference from total harvested area of primary and processed crops (FAO.org) and total organic area (EUROSTAT.eu)
Romania	6,95	Value obtained by difference from total harvested area of primary and processed crops (FAO.org) and total organic area (EUROSTAT.eu)
Ireland	0,14	Value obtained by difference from total harvested area of primary and processed crops (FAO.org) and total organic area (EUROSTAT.eu)
Poland	9,07	Value obtained by difference from total harvested area of primary and processed crops (FAO.org) and total organic area (EUROSTAT.eu)
France	1,21	Field crops under the HVE label
	0,11	Fruit trees under the HVE label
Croatia	0,76	Sum of all fruit crop areas under integrated production
	0,03	Sum of all arable crop areas under integrated production
	0,79	Total sum (arable plus fruit tree)
Sweden	2,48	Based on percentages of how implemented practices are in the JBV report. For example, the total area arable land that the report covers is 2526300 ha. 98% of farms implement the IPM recommendations, hence the guideline is implemented on 2475774 ha of arable land in Sweden.

Summary of surface areas supporting the IPM (ha) of the project partners, and the explanation pertaining to the entered value, for each of the Project State Members.

Knowledge gaps



Not all guidelines were detailed in a comparable manner among different member states.

IPM data (e.g.: acreage per crop, use of a single IPM tool in a guideline, pesticide usage and the reduction of pesticide use in relation to the adoption of the different IPM tools) are generally scant and difficult to access

Most of the MS countries lacked detailed documentation on the different IPM practices (e.g. acreage estimation and pesticide usage) and required either ad hoc estimations

Differences in national legislative frameworks created challenges in evaluating IPM implementation across Europe.

Need to develop a **common baseline** of minimal applications/guidelines needed to foster IPM across MS, keeping in consideration specific climatic conditions, agronomic and local heritage strategies, pest and disease pressure in the different countries/regions.

Potential of Downstream Stakeholders



Certifications schemes (e.g., SQNPI in Italy, eco-labels in Poland) prove to be effective, but need stronger market uptake.

Food industry and retailers can play a key role in rewarding farmers adopting specific IPM strategies.

Involving downstream actors helps broaden rewarded practices and creates stable contracts → long-term motivation for farmers.

Introduce and/or strengthen measures of control on IPM.

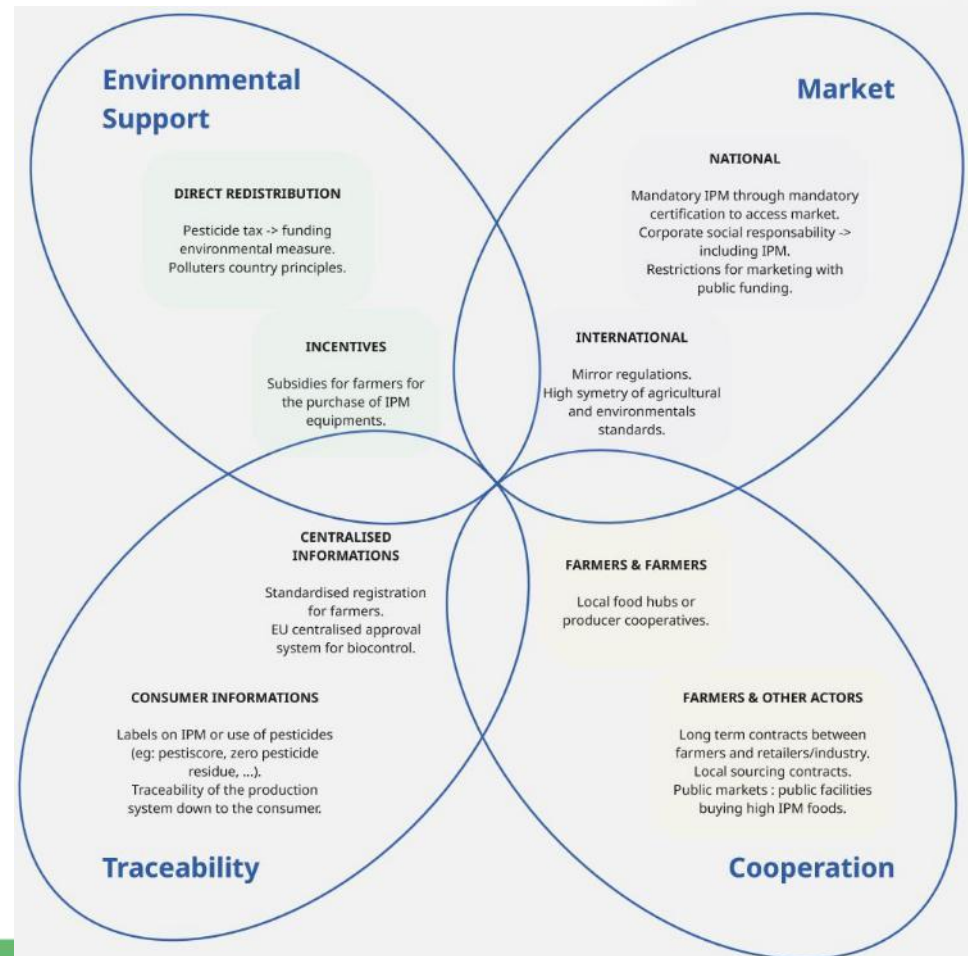
SUPPLY CHAIN

IPM promotion through food safety and quality labels → systems focus on strict traceability to guarantee food quality and safety, encouraging farmers to meet these standards.

Long-term contracts across the supply chains → Stable contracts motivate farmers and suppliers to adopt IPM by reducing risk and promoting investment in sustainable practices.

Complexities of IPM implementation → Regional, national, and international legislation creates challenges for adopting IPM.

Standardized record of cultural practices → Agrowise's IPM Taxonomy offers a standardized framework to document, classify, and promote the adoption of IPM practices.



Take home message



Urgent need for harmonisation of IPM guidelines across Member States



Data transparency: Crop protection practices data should be made accessible, standardised and comparable



Stronger monitoring frameworks are needed to track actual IPM implementation



Collaboration and data sharing between MSs and stakeholders must be improved



The current fragmentation threatens EU sustainability goals

- Need for **common baseline** of minimal IPM applications.
- Improve practicality of guidelines (i.e. cultivar resistance, intercrops).
- Foster open-access databases for IPM adoption data.
- Enhance inspection, certification, and benchmarking systems.
- IPM harmonization → contributes to EU Green Deal goals.

- Today: IPM = fragmented, vague, often voluntary
- Provide incentives so farmers adopt and maintain IPM
- AGROWISE mission: create a clear, scientific baseline, which EU IPM strategies could be re-shaped

Integrated Plant Production system in Poland – practical experience in implementing IPM+

Dr. Wojciech Hałdaś
Ministry of Agriculture and Rural Development, Poland

Ministry of Agriculture and
Rural Development



Integrated Pest Management

– obligatory for MSs



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

Article 55

plant protection products

- shall be used properly:
 - ✓ with application of the principles of good plant protection practice
 - ✓ in compliance with the conditions specified on the labelling
 - ✓ in compliance with general principles of integrated pest management (art. 14 of Directive 2009/128/EC, and Annex III)

Integrated Pest Management – obligatory for MSs



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

Art. 14

Member States shall

- take all necessary measures to promote low pesticide-input pest management, giving wherever possible priority to non-chemical methods
 - ✓ integrated pest management
 - ✓ organic farming
- ensure that professional users have at their disposal
 - ✓ information and tools for pest monitoring and decision making,
 - ✓ advisory services on integrated pest management

ANNEX III General principles of integrated pest management

Intagrated Pest Management



Directive 2009/128/EC

‘integrated pest management’

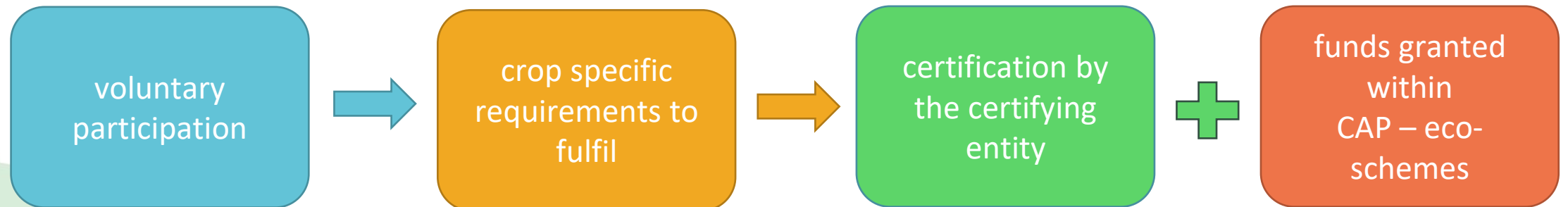
- ✓ discourage the development of populations of harmful organisms
- ✓ keep the use of plant protection products and other forms of intervention to levels that are economically and ecologically justified
- ✓ reduce or minimise risks to human health and the environment
- ✓ growth of a healthy crop with the least possible disruption to agro-ecosystems and encourages natural pest control mechanisms;

Integrated Plant Production (II) – agricultural production quality system

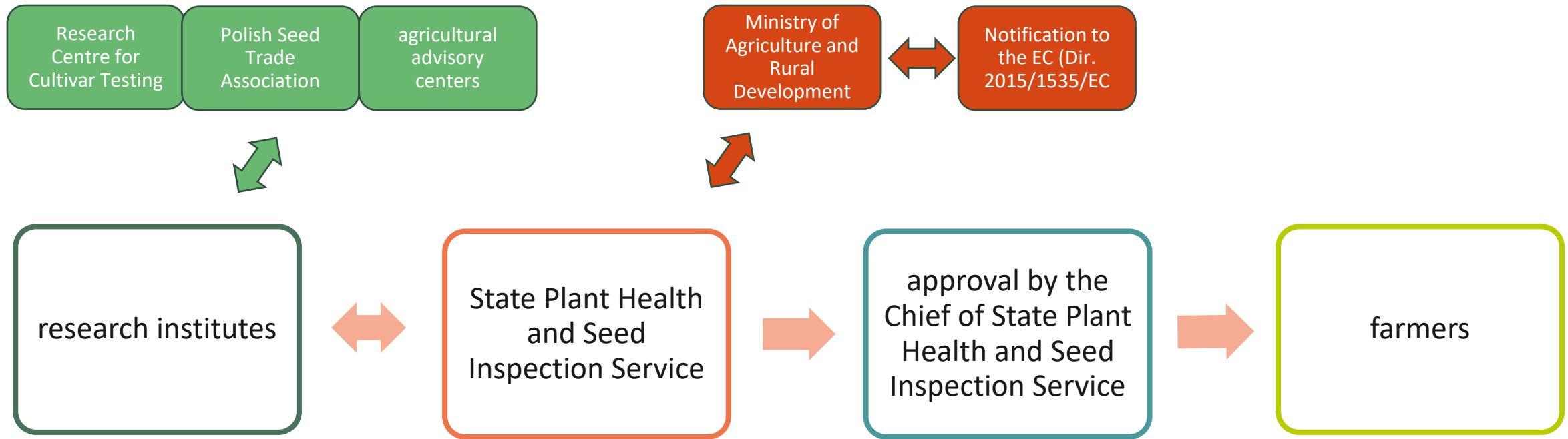


a sustainable agriculture system for producing high-quality agricultural products for the market
the need to clearly define the requirements that will be enforced

ACT of 8 March 2013 on plant protection products
CAP Strategic Plan



IP crop specific methodologies



59 methodologies approved +16 notified to the European Commission

IP methodology for apples



main elements

- soil preparation and orchard establishment
- fertilization and liming
- soil maintenance and weed control
- orchard care
- protection against diseases
- protection against pests

- list of mandatory activities and treatments in the IP of apples
- checklist for orchard crops
- Annexes:
 - ✓ disease control in IP of apples
 - ✓ threat thresholds for major apple pests
 - ✓ list of pests and their control periods

IP methodology for apples



list of mandatory activities and treatments in the IP of apples (100%)

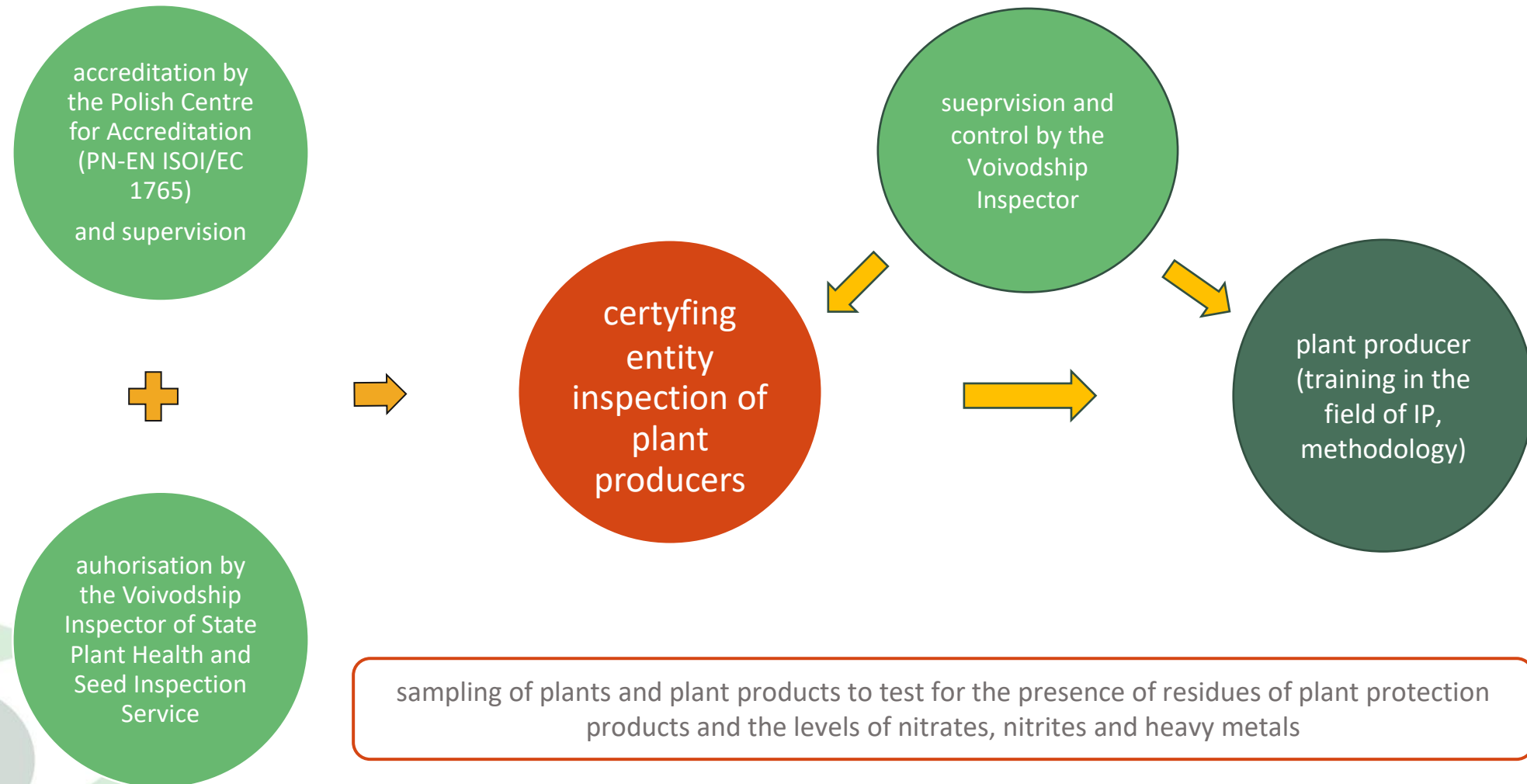
list of additional requirements for orchard cultivation (minimum 50% compliance)

list of recommendations (minimum 20% compliance)

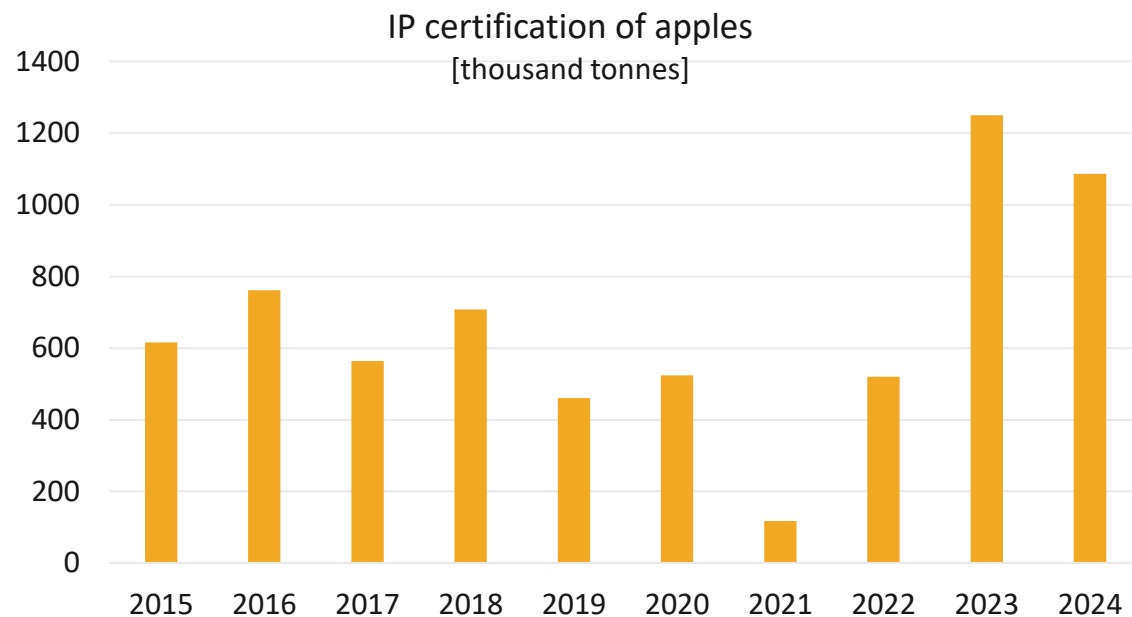
The lists cover general IPM principles, but additionally includes as mandatory requirements such as:

- use of preparations with mechanical/physical mechanism of action in aphid control
- introduction and monitoring of the presence of predatory mites from the Phytoseiidae family
- use of preparations with mechanical/physical mechanism of action in the control of spider mites and mites from the family Eriophyoidea
- use of biological plant protection products (at least one of the treatments should be performed with such a preparation) in the pest control programme (codling moth, leafroller moths)
- creating suitable conditions for predatory birds that control the rodent population

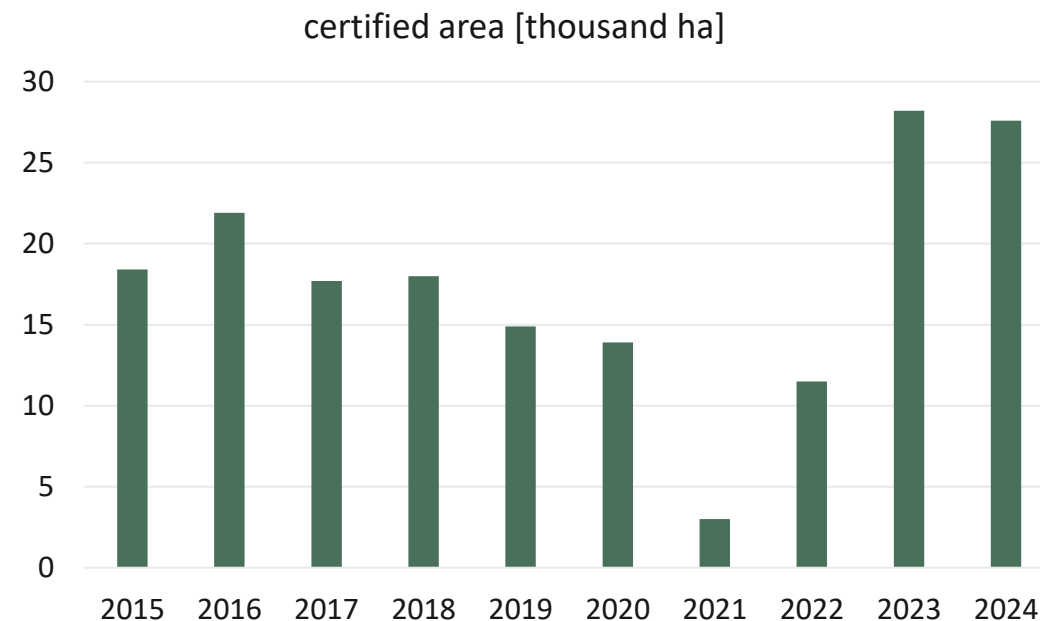
IP certification



IP certification results for apples



	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
production [thousand t]	615,9	761,7	563,8	707,9	460,5	523,6	117,3	520,6	1249,9	1086



	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
certified area [thousand ha]	18,4	21,9	17,7	18	14,9	13,9	3	11,5	28,2	27,6

Year	Number of new COVID-19 cases
2020	1,000
2021	1,500
2022	2,500
2023	10,000
2024	20,500

Dziennik Urzędowy

- 2 -

Pos. 760

Załącznik do rozporządzenia Ministra Rolnictwa
i Gospodarki Wsi z dnia 24 czerwca 2012 r. (Dz. U. poz. 760)

CERTYFIKAT POŚWIADCZAJĄCY STOSOWANIE INTEGROWANEJ PRODUKCJI ROŚLIN

CERTIFICATE OF COMPLIANCE WITH INTEGRATED PLANT PRODUCTION

(numer certyfikatu)

(imię, nazwisko oraz miejsce zamieszkania i adres albo nazwa, siedziba i adres producenta roślin)

..... – f	 – f
..... – f	 – f
..... – f	 – f
..... – f	 – f
..... – f	 – f

Zaświadczam się, że wymienione rośliny zostały
wyprodukowane zgodnie z wymaganiami
integrowanej produkcji roślin.

It is to certify that the above-mentioned plants
have been produced according to the rules of
integrated plant production.

Niniejszy certyfikat jest ważny do dnia: The certificate is valid until:

Podmiot certyfikujący Certifying Subject

(miejscowość, data)

(podpis osoby wydającej certyfikat oraz pieczęć podmiotu
certyfikującego)

Certyfikat poświadczający stosowanie integrowanej
produkcji roślin wydany na podstawie ustawy z dnia
8 marca 2013 r. o środkach ochrony roślin (Dz. U.
poz. 455).

Certificate of compliance with integrated plant
production was issued on the basis of the law on plant
protection products of 8 March 2013 (O.J. pos. 455).

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Liczba wydanych certyfikatów	811	1557	1891	1915	1174	838	1068	1482	2465	2898	3178	3137	4207	3628	3876	3325	3027	1418	2436	10169	20757

Conclusions



Cooperation

research institutes, administration,
industry organisations, farmers and other
stakeholders

Flexibility

different farm sizes, different climatic and
soil conditions, production profile, level of
farm organisation, availability of
machinery, and economic conditions,
ability to make quick decisions/take
quick action in response to unforeseen
situations,

Availability of alternatives

scientific and technological progres
biological plat protection products
basic substances

Financial suport

the possibility of refinancing additional
costs increases participation in food
production quality schemes



Let's Open the Discussion

Opportunities to upgrade initial training and life-long learning for farmers and advisors on IPM

Presented by Dr Christian Huyghe, INRAE, France

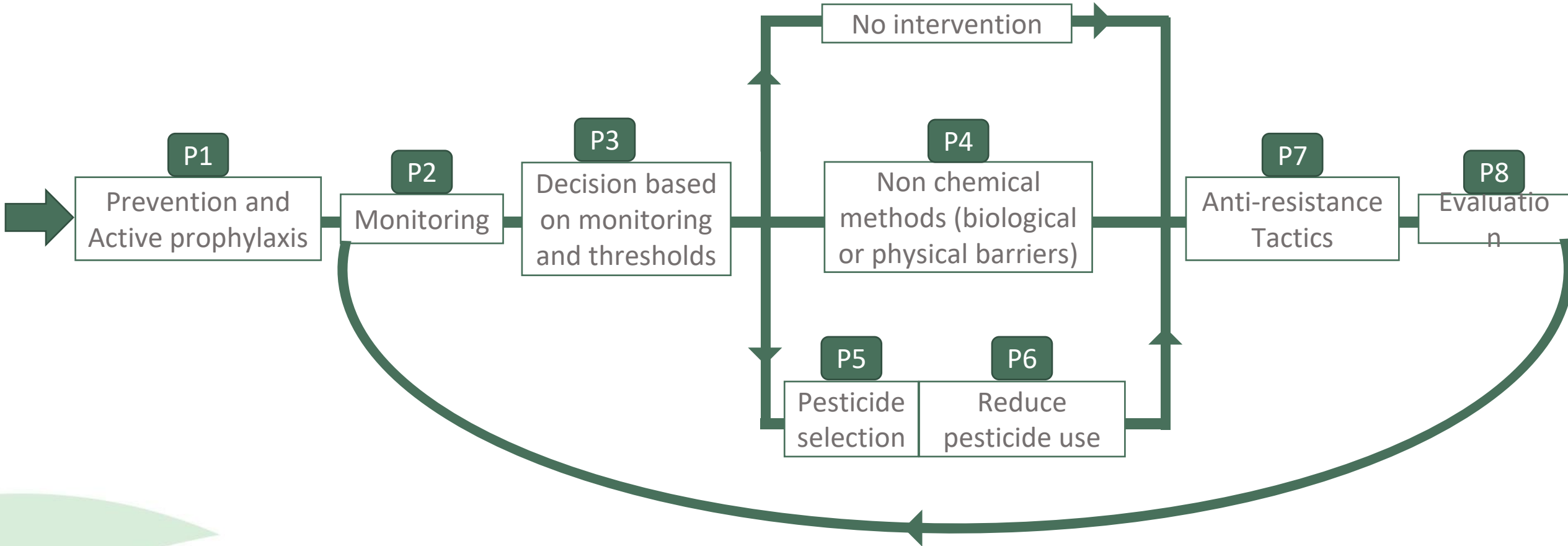
Discussant: Declan Kealy (Ireland)

Opportunities to upgrade initial training and life-long learning for farmers and advisors on IPM

Objective: Reviewing the current transfer knowledge to farmers and the related stakeholders and identifying effective methods to improve it, with the co-design phase developing guidelines and recommendations to enhance knowledge exchange to and among farmers.

How the emerging paradigm has an impact on the training issue?

A new IPM paradigm emerged



Key messages

As discussed within the consortium and the group of experts and validated through the discussions with the stakeholders' group

- **Essential role of training for farmers, advisory services and beyond**
- **Strengthening advisory services**
- **Developing networks and tools**
- **Science-based training**

Towards an IPM training flagship program across Europe

Training

Beyond farmers and advisors

Unlocking the socio-technic systems

- Impact of crop protection on environment and health
- Increasing awareness on prophylaxis, innovative practices and systems
- Science-based decisions

Policy makers and civil servants

Downstream

- Cost and value of crop protection options
- IPM-based scope 3
- Market quality labels

Upstream

- Prophylaxis-based crop protection
- Systemic approaches

More tools and resources

- Pedagogic tools
- Prophylaxis-oriented workshops
- Pest monitoring
- Demo-farms
- Revised IPM Decision Support Systems
- Peer to peer learning

Sharing good practices among farmers
Local communities
Collaboration among farmers for landscape-wide preventative actions
Research Advisors

More exchanges

Revised syllabus

- From IPM principles to practices
- IPM practices and systems (Prophylaxis, alternatives and innovations)
- Health of practitioners

Advisors and contractors

- Life Long Learning
- Extension activities
- Towards a European academy of advisors

- Academic teaching
- Life long learning
- Gender issue

Farmers' training

Mandatory
Formal training

Informal
training
Top-Ups

Formal training

Improving the quality of farmers training

Enhancing advisor training

The related syllabus must be based upon recent scientific results

Formal training

Mandatory

Revised syllabus

- From IPM principles to practices
- IPM practices and systems (Prophylaxis, alternatives and innovations)
- Health of practitioners

Advisors and contractors

- Life Long Learning
- Extension activities
- Towards a European academy of advisors

- Academic teaching
- Life long learning
- Gender issue

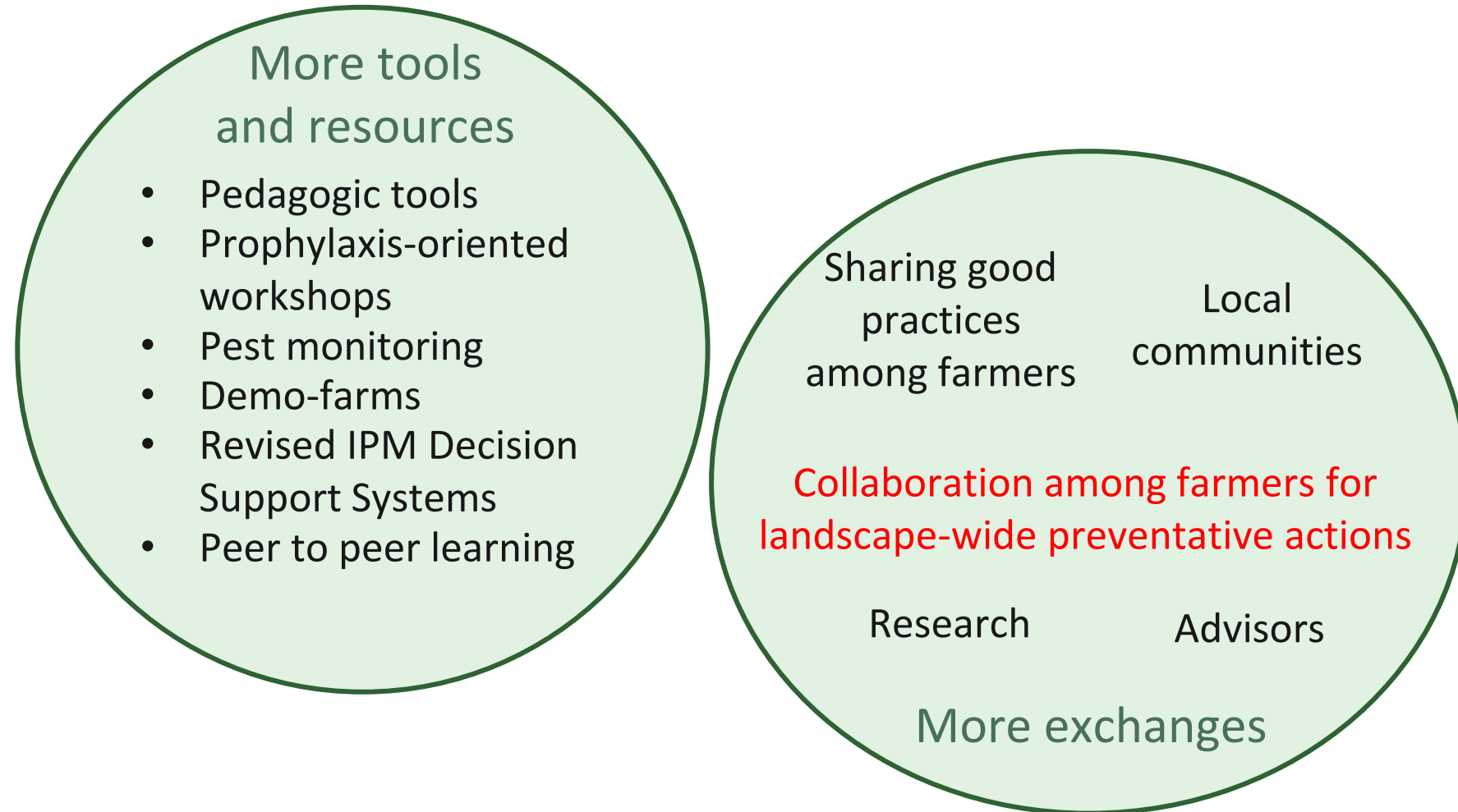
Farmers' training

Informal training

Promoting farmers collaboration and networking, and a new generation of tools

Informal training

Top-Ups



Training beyond farmers and advisors

Training throughout the
socio-technic system
(downstream, upstream,
administration)

Beyond farmers and advisors

Unlocking the socio-
technic systems

Downstream

- Cost and value of crop protection options
- IPM-based scope 3
- Market quality labels

- Impact of crop protection on environment and health
- Increasing awareness on prophylaxis, innovative practices and systems
- Science-based decisions

Policy makers and
civil servants

- Prophylaxis-based crop protection
- Systemic approaches

Upstream



Let's Open the Discussion

Define criteria to support the delivery of a framework for Member States to develop crop-specific guidelines



AGRICULTURE AND FOOD DEVELOPMENT AUTHORITY



Fiona
Thorne



Steven
Kildea

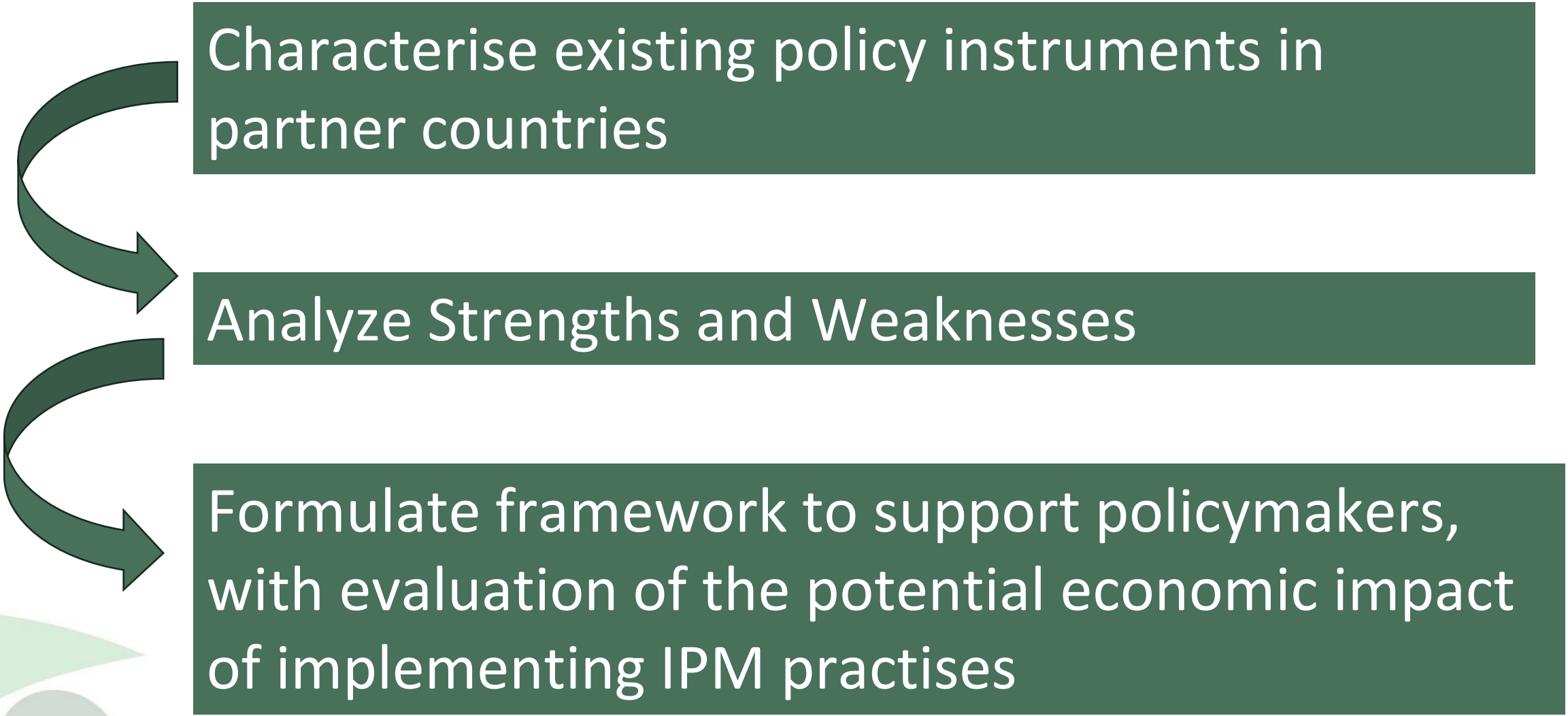


Ewen
Mullins



Clemence Decherf
Fiona Dowson

How can we achieve this for WP4?



Characterise existing policy instruments in partner countries

Analyze Strengths and Weaknesses

Formulate framework to support policymakers, with evaluation of the potential economic impact of implementing IPM practises

How can we achieve this for WP4?



Characterise existing policy instruments in partner countries

Analyze Strengths and Weaknesses

Formulate framework to support policymakers, with evaluation of the potential economic impact of implementing IPM practises

Published database with inventory of IPM related policy instruments

- 1 tab containing the database – with one line per instrument collated
- 1 introduction tab with Agrowise presentation and definitions

C	D	E	F	G	H	I
Scope						
Country	Geographic scope	Comment on scope	Linked to an EU policy?	Which EU policy?	Main policy instrument	Policy instrument name (english)
France	National		Yes		National action plan	DEPHY network of pilot farms
France	National		Yes		National action plan	Individual certificate for plant protection
France	National		Yes		National action plan	Individual certificate for plant protection
France	National		Yes		National action plan	Individual certificate for plant protection
France	National		Yes		National action plan	Crop health bulletin
France	National	Article 14 of Directive	Yes		National action plan	Integrated pest management portal
France	National		Yes		National action plan	30 000 farms measure
France	National		No		National instrument	Diffuse pollution tax
France	National		No		National instrument	Phytopharmacovigilance tax
France	National		No		National instrument	Low PPP use certification
France	National		No		National instrument	Strategic advice
France	National		No		National instrument	Specific advice
France	National		Yes		National action plan	Research and innovation strategy
France	National		Yes	CAP eco-scheme	National instrument	High environmental value (HEV) certification
France	National		No		National non-public instrument	Zero Pesticide Residue label
France	National		No		National non-public instrument	Zero-pesticide label
France	National		Yes	Regulation (EU) 2017/817	National instrument	Avenir Bio Fund
France	National		Yes	Regulation (EU) 2017/817	National instrument	Organic farming National plan
France	National		No		National instrument	Payments for environmental services
France	National		No		National instrument	PPP database
France	National		No		National instrument	Buffer zones
France	National		No		National instrument	Lower registration fees for low-risk and biocontrol PPP
France	National		Yes	CAP	CAP instrument - eco-scheme	Eco-scheme
France	National		No		National instrument	Ban of aerial spray
France	National		No		National instrument	ENVCLIM - Conversion aid for organic



Inventory of existing policy instruments related to IPM

AGROWISE

[Guidelines for farm-specific or crop-specific rules for mitigating pesticides impacts while ensuring sustainable agriculture](#)

Introduction to Agrowise:

The Agrowise project is a part of the EU "LIFE Program", and aims at developing guidelines for farm-specific rules or crop-specific for mitigating pesticide impacts while ensuring sustainable agriculture. Developed by a consortium of 10 research organisations from 8 EU countries, this project will contribute to achieve the Farm to Fork strategy objectives of a 50% reduction in chemical pesticide use by 2030.

This project contains two strategic pillars from enhanced Integrated Pest Management (IPM) implementation: information on plant protection practices and information on policy instruments and their efficiency.

**Co-funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or CINEA. Neither the European Union nor the granting authority can be held responsible for them.*

Acknowledgements:

This database contains a list of policy instruments related to IPM implemented in the 8 AGROWISE partners countries (DE, FR, HR, IE, IT, PL, RO, SE). This list is not exhaustive and will be updated if additional policy instruments appear relevant.

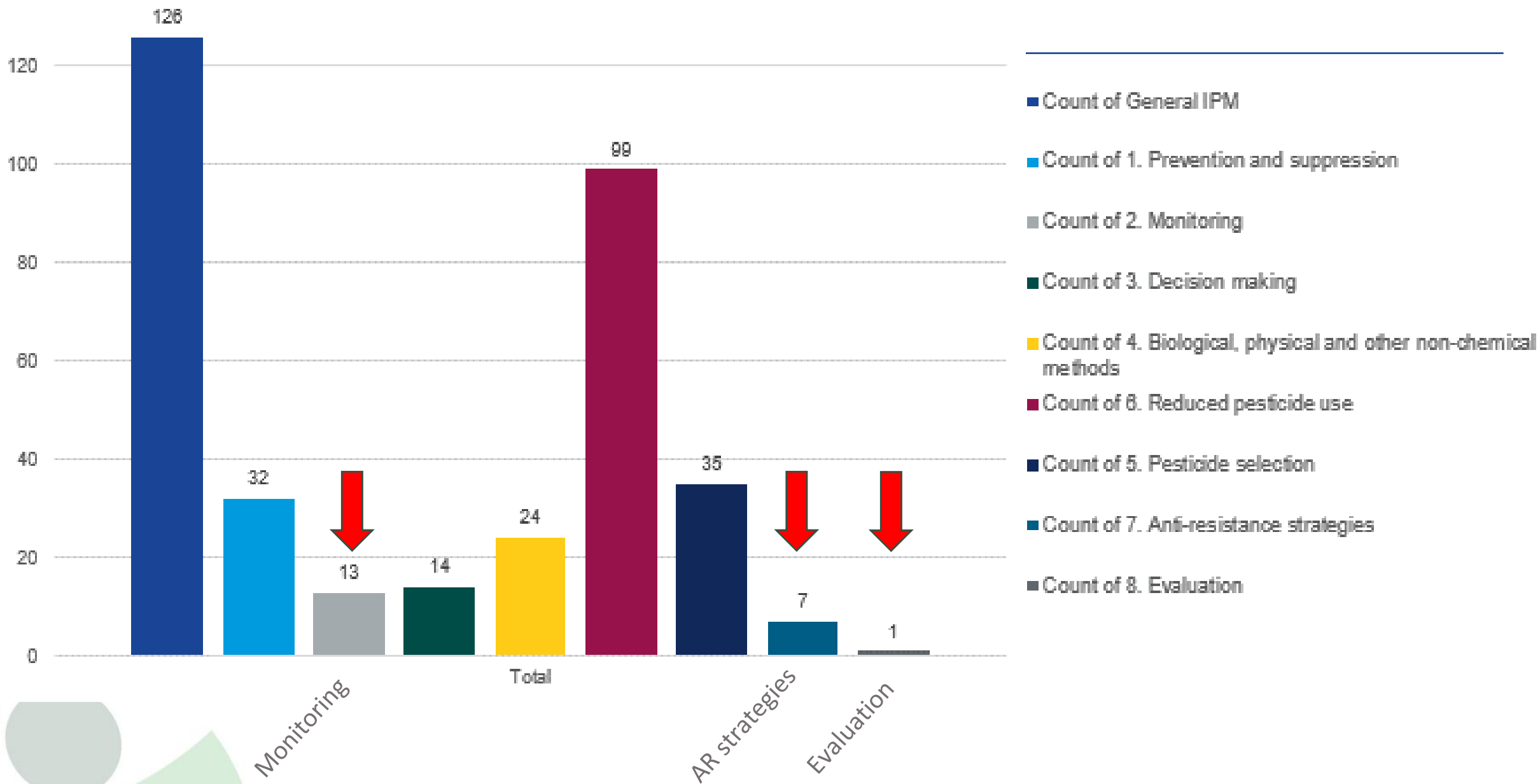
Status:
20/01/2025 - V3 - draft version
Next step: sense check with national stakeholder interviews

Definitions:

Category	Option	Definition
<u>Geographic scope</u>	National	Relating to a whole country
	Regional	Relating to or coming from a particular part of a country
	Other (specify)	Geographic scope other than national or regional
<u>Linked to an EU policy?</u>	Yes	Linked to an EU policy
	No	Not linked to an EU policy
<u>Main policy instrument</u>	National action plan	National Action Plan according to Directive 2003/128/CE.
	CAP instrument - enhanced conditions	CAP payments linked to a stronger set of mandatory requirements
	CAP instrument - eco-schemes	Annual CAP direct payments used for climate, environment and animal welfare purposes
	CAP instrument - eco-schemes	CAP payments linked to a stronger set of mandatory requirements

[Introduction](#) | [Database](#) | [Sheet1](#) | [+](#)

Over-reliance on 'general IPM' related policy instruments

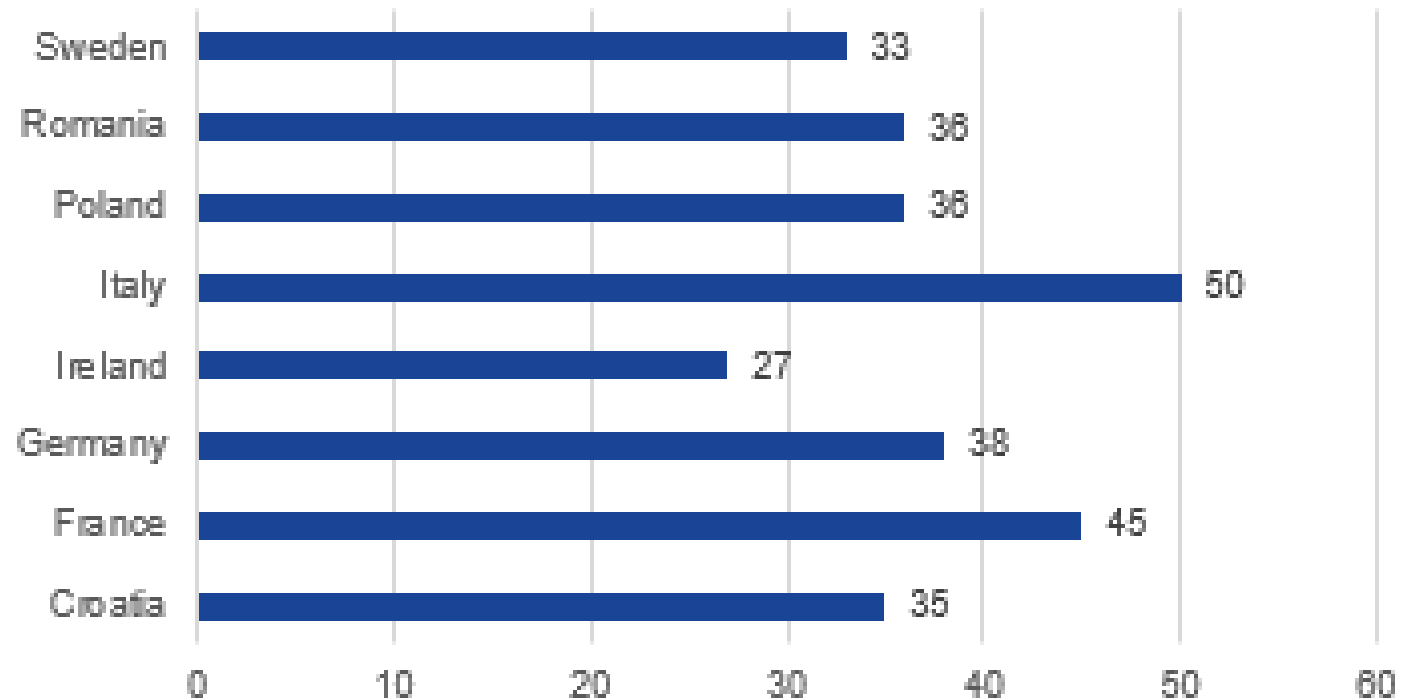


Outputs

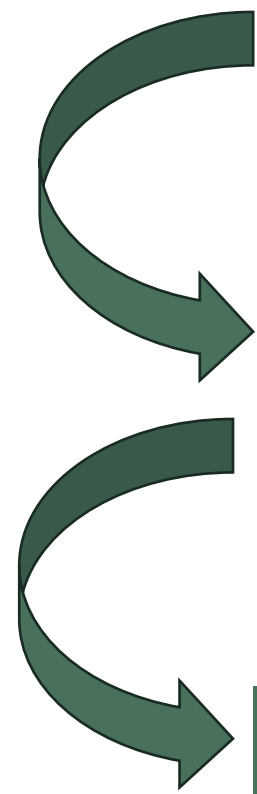
>300 existing policy instruments have been identified in the 8 Agrowise partner countries

- 41% of the instruments are binding, and 59% are optional
- **79% are targeting farmers**
- 5% targeting advisors
- 4% retailers
- 3% PPP registration holders
- Most (87%) of the instruments' implementation are led by national authorities

Number of policy instruments per country



Next step?

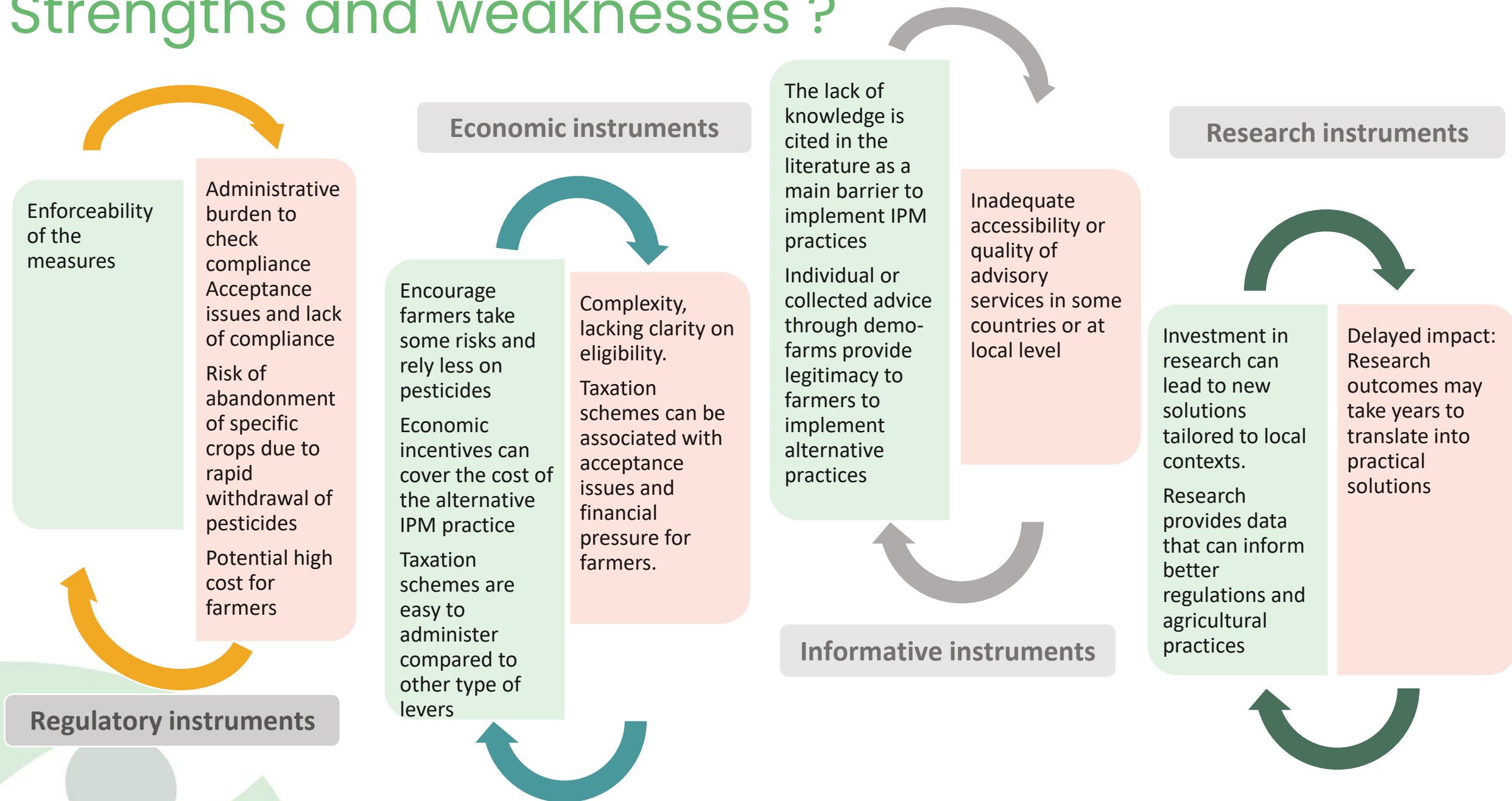


Characterise existing policy instruments in partner countries

Analyze Strengths and Weaknesses of existing policy instruments

Formulate framework to support policymakers, with evaluation of the potential economic impact of implementing IPM practises

Strengths and weaknesses ?



Factors influencing effectiveness of IPM policy instruments?



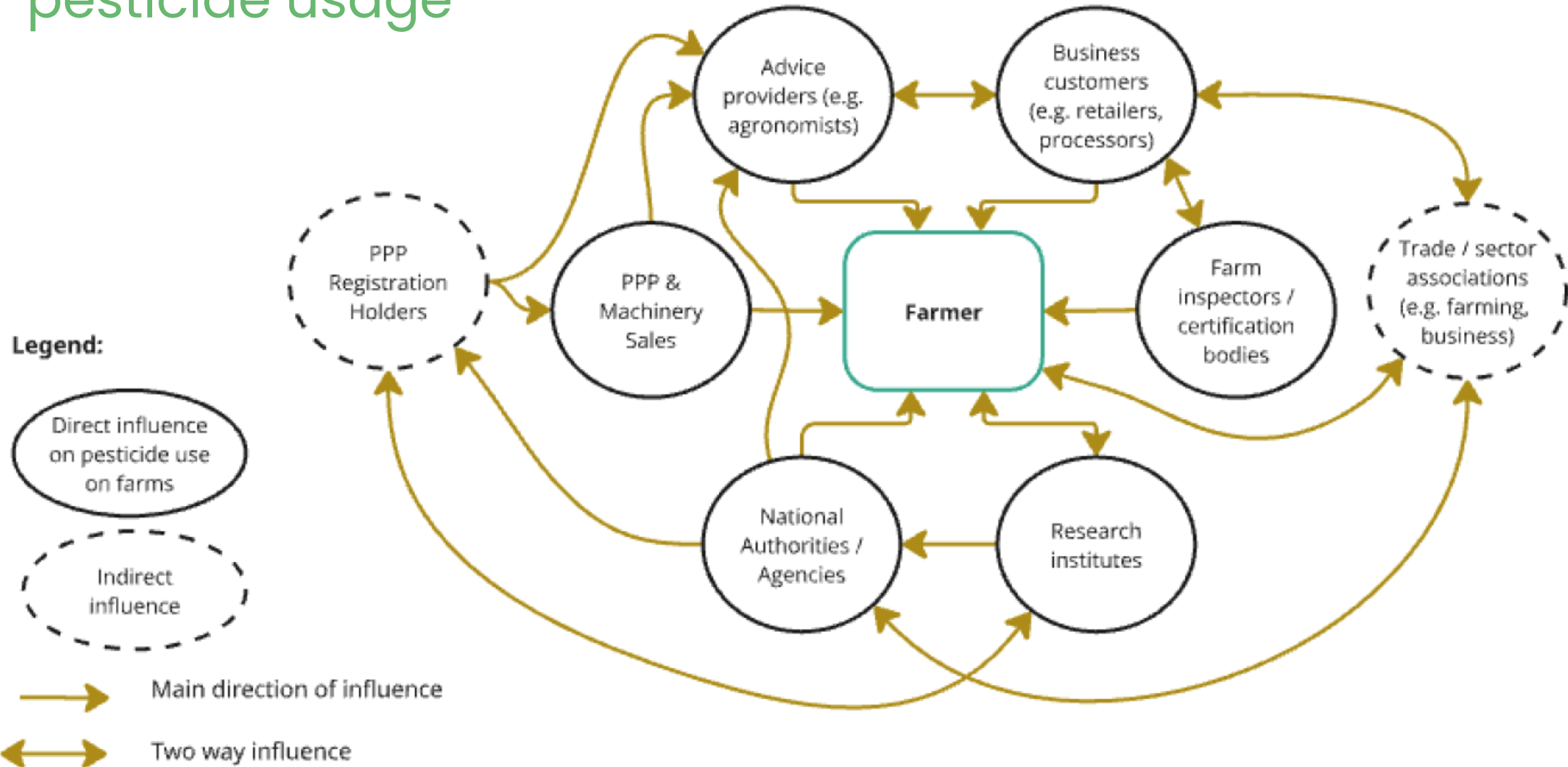
Tailoring
instruments to
local context
and conditions

- Farm and market contexts
- Level of knowledge on IPM and the level of awareness of available IPM policy instruments
- Behavioural factors

Engaging
stakeholders in
the policy
making process

- Stakeholder participation increases the quality of environmental decisions, improves the legitimacy of the instruments and the likelihood of their adoption

Influencers on a farmer's decision making process on pesticide usage

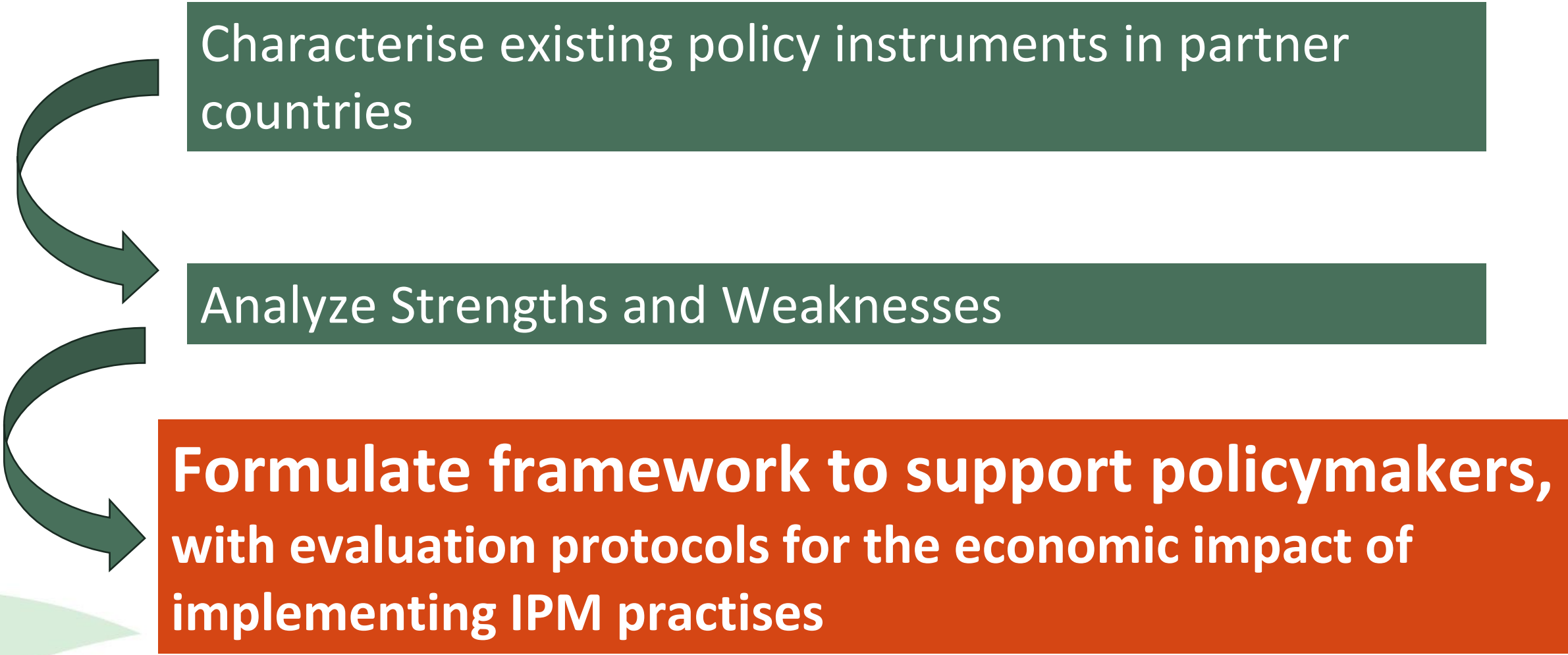


Targeting all stakeholders?

Italy

	Regulatory Economic Informative Research					
Farmers / growers (directly)	Farm advisors	PPP & equipment retailers	PPP registration holders	Business customers	National Authorities / Agencies	Research institutes
Permit to use, advise or sell PPPs						
Reg EC 396/2005 Max Residue Levels						
Limit concentration value for PPP and metabolites in groundwater						
Buffer zones					Reg EU 2016/ 2031: Plant Health Law	
Inspection of equipment in use			Lower registration fees for low-risk and biocontrol PPP	Reg (EU) 2018/848 Organic Label		
pre-harvest use of Glyphosate ban						
CAP eco-schemes, CAP AECM, CAM CIS			Pesticide tax		indicators to measure the effectiveness of IPM interventions	
PPP database						
Interprovincial bulletins of integrated and organic production and forecast						
Integrated production national guidelines						
Integrated pest management manual						
Cooperation between researchers and farmers (regional instrument)						
Advisory services						
National Quality System Integrated Production						
Best practices tool						
Ecological Network Plan within the Provincial Coordination Plan (PCTP)						
Regional annual crop bulletins						
Regional Training and information on the risks to biodiversity by PPP						
Ecolabel Agriqualità						

What does this mean for Framework?



Characterise existing policy instruments in partner countries

Analyze Strengths and Weaknesses

Formulate framework to support policymakers, with evaluation protocols for the economic impact of implementing IPM practises

4 Action Framework to support generation of Farm-Specific Guidelines for Targeted Stakeholders

IPM policy instruments
to ensure they reflect
the national farm
context

Adapt

Include

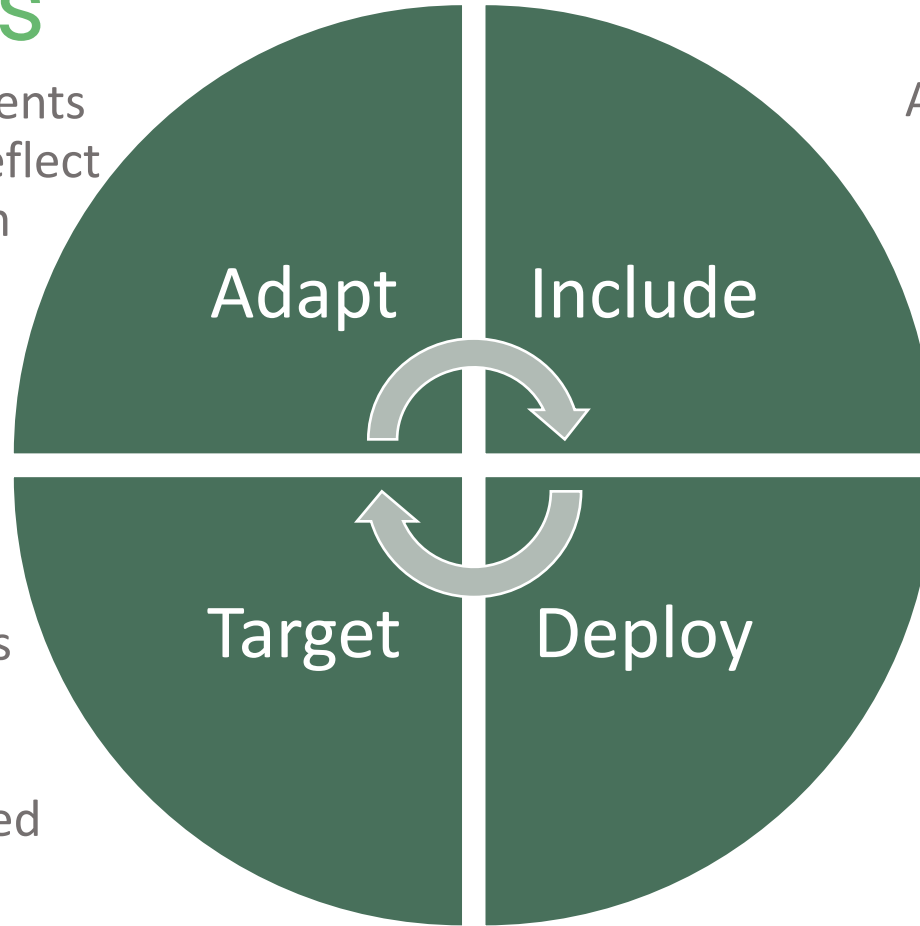
All relevant
stakeholders in
the value / supply
chain

All IPM principles
relative to the
agronomic
challenges faced

Target

Deploy

Mix of policy
instrument types to
support stakeholder
awareness and
implementation



Adapt for challenge, Include all stakeholders ...

ADAPT

IPM policy
instruments to
ensure they reflect
the national farm
context

- Several factors (external or internal) proven to contribute to effective policy outcomes:
 - Behavioural factors, farm and market contexts, the level of knowledge on IPM
 - Cropping systems, farm size, economic situation, the farmers' demographic, etc.
- Ensure IPM objectives clearly defined
 - Both at national level to drive the design of IPM policy instruments
 - More importantly at local level

INCLUDE

All the relevant
stakeholders

While farmers implement IPM practices, they do not act in isolation.

- Decision on pesticide use influenced by multiple stakeholders (e.g. Tier, 1, 2, 3, 4)
- Policy makers should identify the full suite of stakeholders engaging with farmers and characterise the type of interaction and links of influence.

Deploy mix of instruments, Target all IPM Principles ...

DEPLOY

a mix of policy instrument types to support stakeholder awareness and implementation

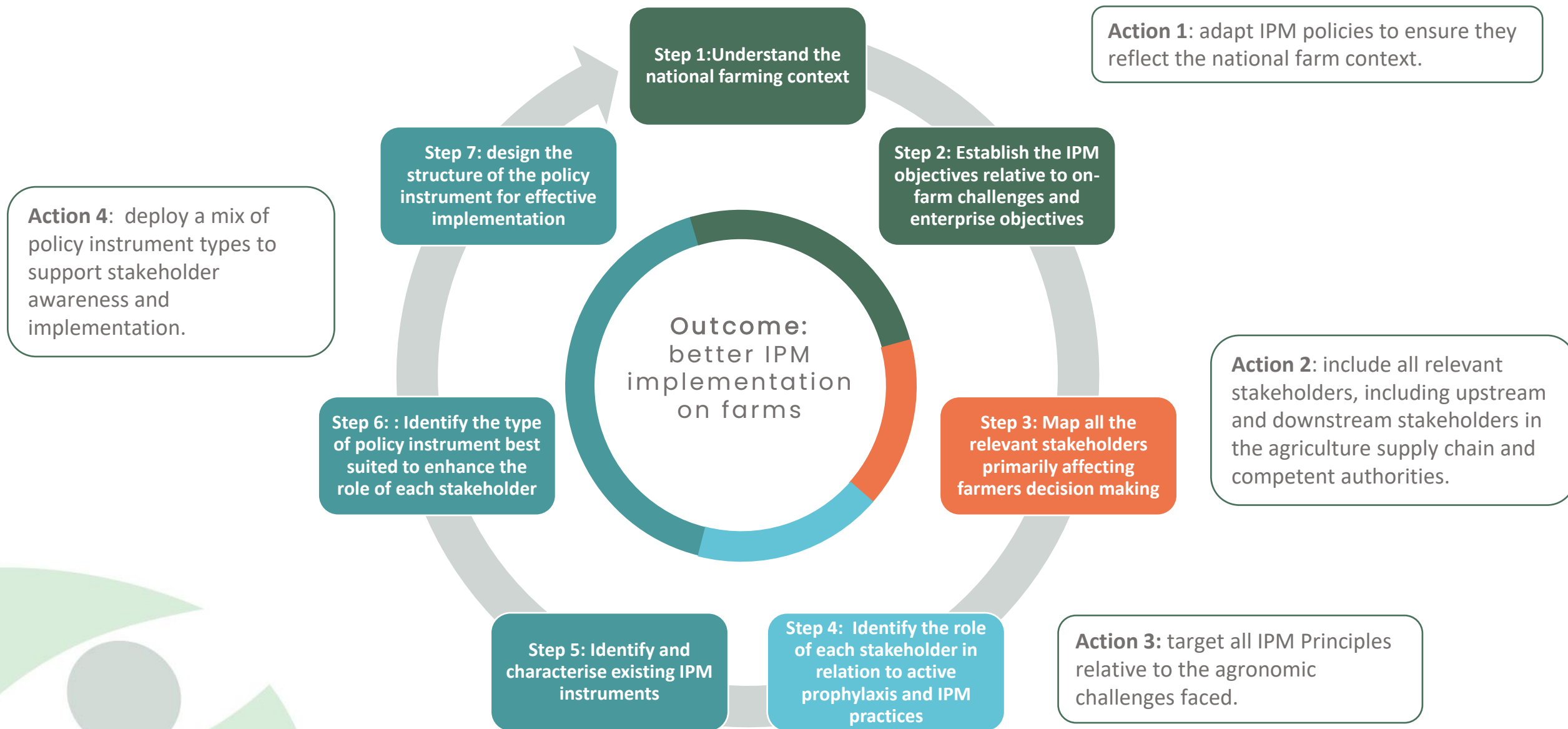
- Most IPM policy instruments are generic and fail to target IPM Principles specifically.
- Designing policy instruments to target specific IPM practices will improve the implementation of such practices, especially practices most relevant to Active Prophylaxis.
- Possibility to use the harmonised IPM taxonomy (WP2) as a supporting tool.

TARGET

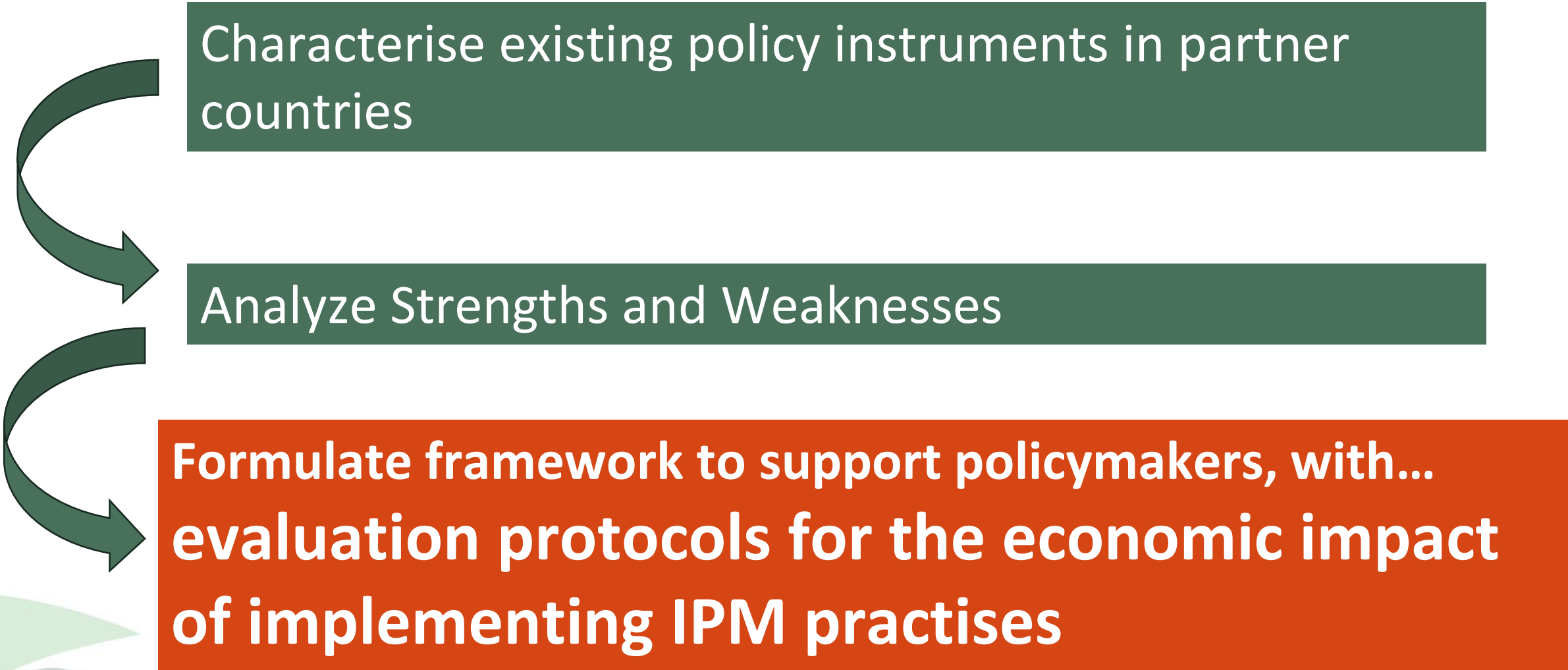
all IPM Principles relative to the agronomic challenges faced

- Using instruments of different nature (economic, informative, regulatory, etc.) provides adequate flexibility to afford policies the opportunity to address the different drivers that farmers and other stakeholders will answer to.
- Mixing instruments from different categories offers flexibility and addresses the agricultural landscape specific to each country.

Practical 7 Step process plus case study developed to support policy makers writing these recommendations



What does this mean for Framework?



Characterise existing policy instruments in partner countries

Analyze Strengths and Weaknesses

**Formulate framework to support policymakers, with...
evaluation protocols for the economic impact
of implementing IPM practises**



Case Study: PUR for cereal Production in Ireland

Cost benefit assessment of
pesticide use reduction (PUR)
& adopting IPM for cereal
disease control

IPM practices (e.g. sowing
date, rotation expanded,
improved varieties, pest
monitoring)

Impact?

- Scenario indicates high variability dependent on crop – pest
- IPM critical to closing the economic gap
- Case for crop specific policy supports
- IPM improves scenario but not uniformly

Case Study: PUR in French arable systems

Analysis exploited empirical data from 946 commercial farms

Diverse agroecological/production

Study estimated marginal effects of PUR on profitability

Impact?

- PUR could be achieved in 59% of farms, without negatively affecting productivity/profitability
- Remaining 41% excluded due to higher production risk profiles
- Heterogeneity reinforces need for targeted policy instruments

Lechenet et al. (2017)





Case Study: PUR in Croatian apple systems

Study conducted in commercial apple orchard

Compared insecticide-based control of Codling Moth, with IPM based mating disruption (MD) via pheromone dispensers

Impact?

- Modest financial advantage (~4%) with MD scenario
- Specific to apple – codling moth
- Scalability and viability not guaranteed
- Application of protocol confirmed with use of empirical plus FADN data

Peer To Peer Learning Among Farmers – Ireland

Declan Kealy,

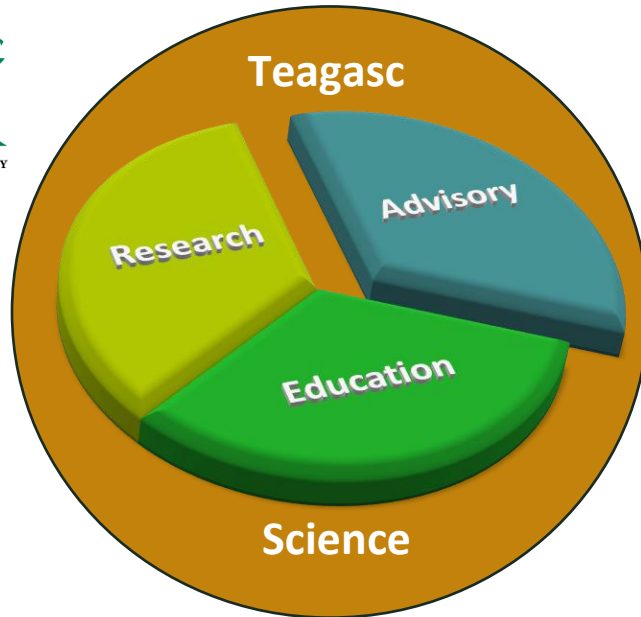
Pesticide Control Division (PCD),

Department of Agriculture, Food and the Marine (DAFM),



**An Roinn Talmhaíochta,
Bia agus Mara**
Department of Agriculture,
Food and the Marine

Peer To Peer Learning Among Farmers – Ireland



Ireland (IE) – Statistics:

- 130,000 Farmers
- UAA 4.6m Ha
- 90% Grassland
- 7 Million Bovines

Discussion Groups

- New Zealand – Concept,
- Adopted in Ireland 1990/91,

Role Of The Advisor

- Technical Knowledge,
- Group Facilitation, (personal development).
- Provide structure, Collaboration,
- Independent advisors, Industry experts,
- Encourage ownership of group



Peer To Peer Learning Among Farmers – Ireland





Highlights of the session:

IPM endorsement by the agricultural stakeholders,
especially the supply chain, to increase
its adoption and to reduce burden on
farmer

Maud Blanck, Agrowise coordinator, INRAE, France

Conclusion

Patrick Flammарion, Deputy director general for expertise and public policy support at INRAE, France

Thank you for your attention

Disclaimer

Co-funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or CINEA. Neither the European Union nor the granting authority can be held responsible for them.



**Co-funded by
the European Union**