IPM Decisions – Forecasts, monitoring and DSS

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Data-driven decisions can deliver profitable IPM

Decisions Support Systems
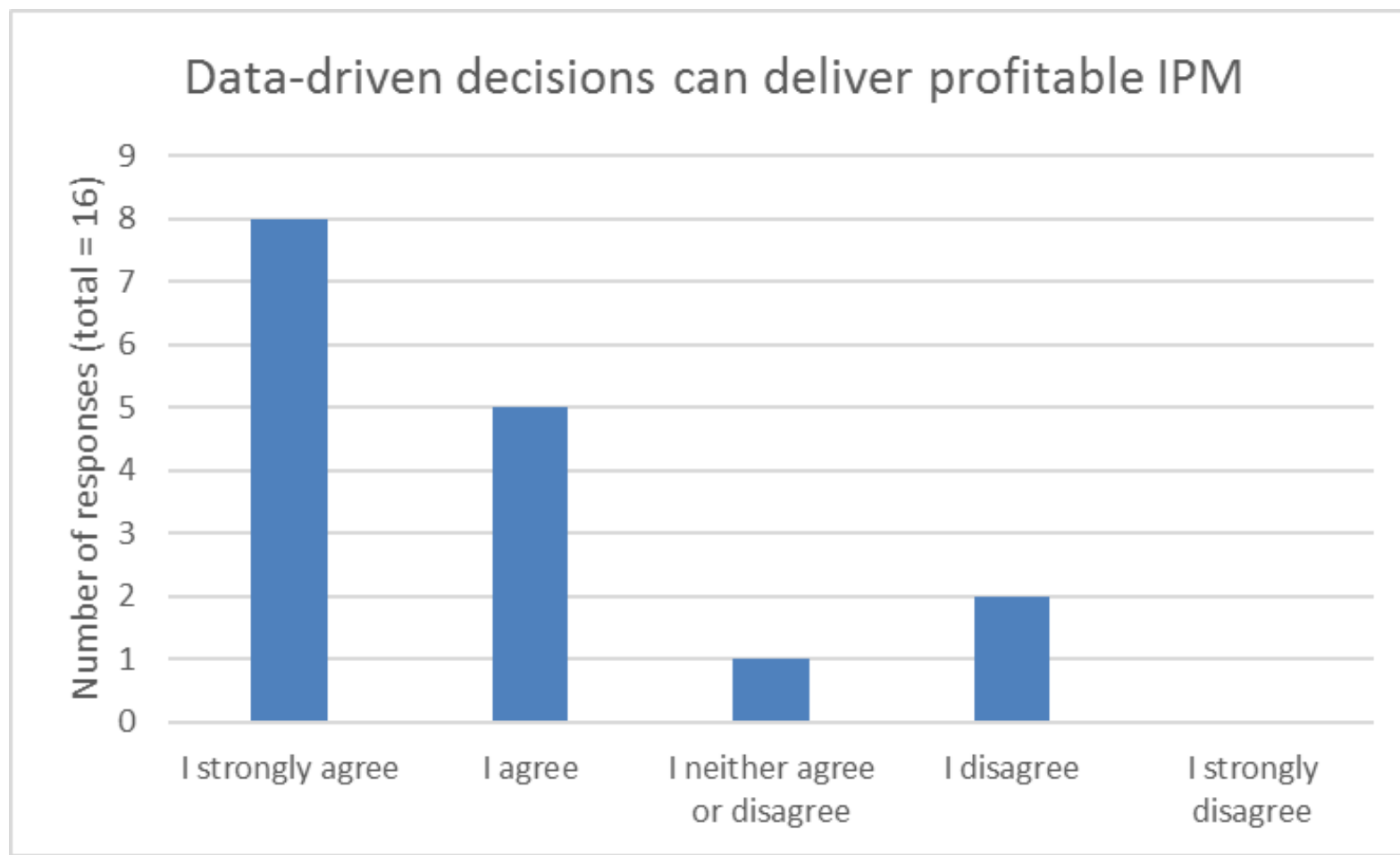
What limits the use of decisions support systems?

- ❑ Unaware of available DSS

- ❑ The DSS are not user friendly

- ❑ The DSS are insufficiently risk-averse

- ❑ The benefits of the DSS are unclear

- ❑ DSS do not reflect multi-pest pressures

- ❑ Unwilling to trust DSS outputs
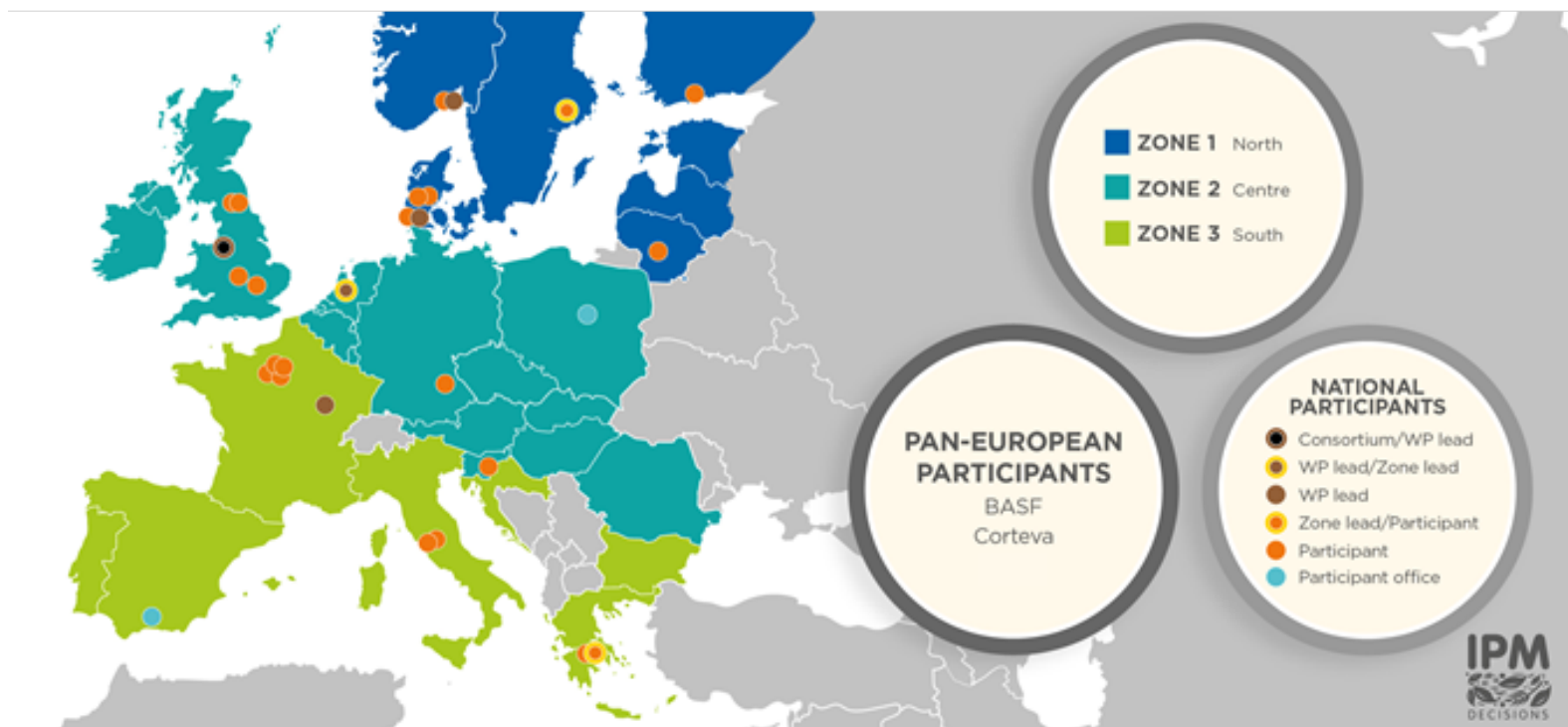
- ❑ Lack of support in using DSS

sli.do

#BCPCPB

IPM Decisions

Increase the impact of on-farm DSS for IPM

What will IPM Decisions deliver?

A pan-European online Platform

- Delivering DSS, data, tools and resources

An IPM Decisions Network

- Forming a community of users and stakeholders across the EU

Pan-European online platform

Farmer and adviser
- End users of DSS
- Simple 'click and go' platform to find and run DSS

Applied research or advisor
- <u>Adopting</u> DSS developed in other countries
- Testing/comparing DSS

Researchers
- <u>Adapting</u> DSS developed in other countries
- Evaluate effect of changes on validity

Developers of farm DSS
- Creating new DSS
- Combining existing DSS on platform

Workshops

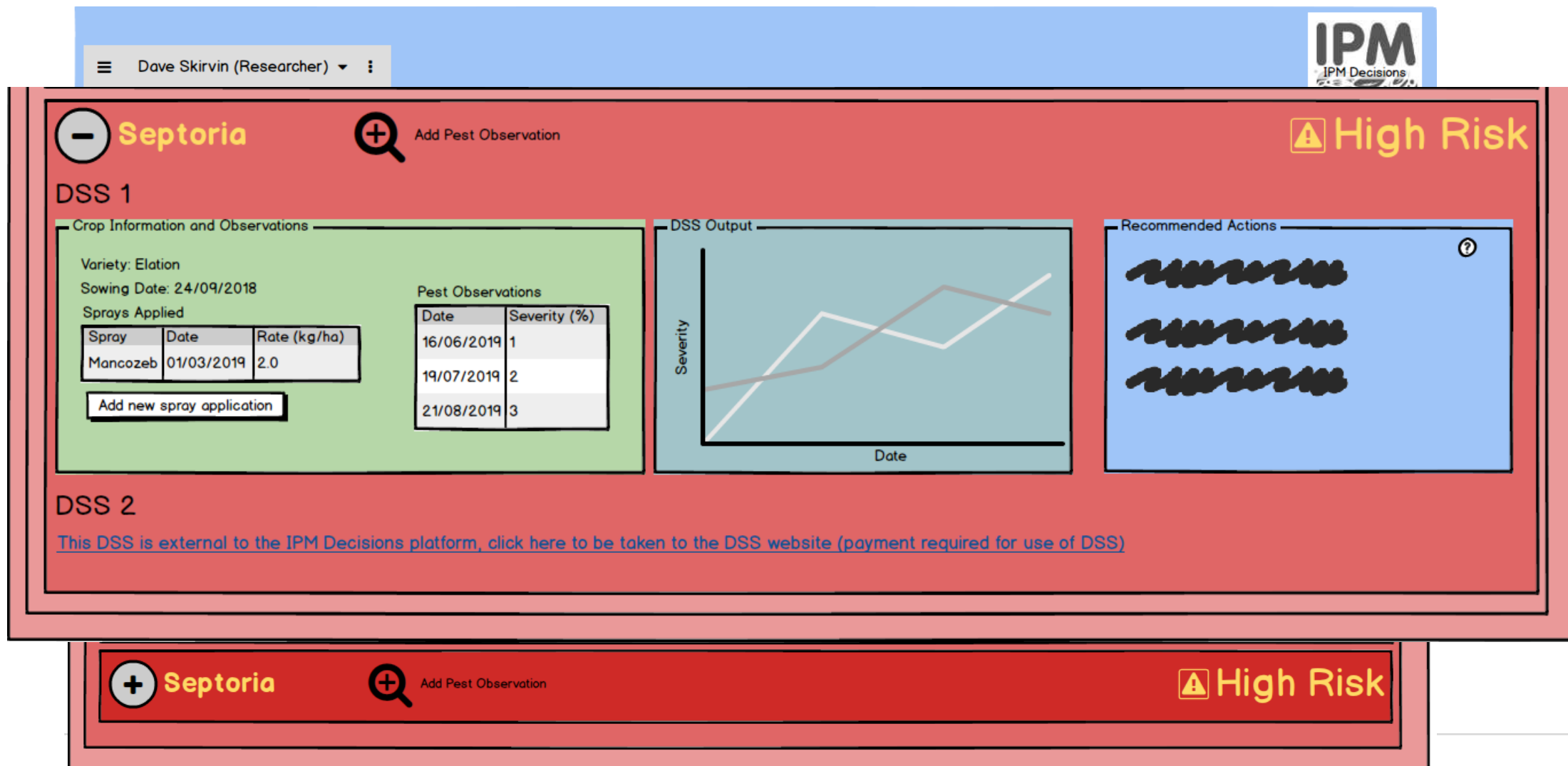*Increase user access to, and uptake of, IPM DSS*

Email: Mark.Ramsden@adas.co.uk

Strongly agree ☐
Agree ✅
Disagree ☐
~~ly disagree~~ ☐

Example mock-up farmer dashboard

Quantify the benefits of using DSS

DSS name/description	Crop	Target pest	known to be validated	description of model published	developed since
Crop Protection Online	wheat	Aphids in wheat	1	1	1990
Crop Protection Online	barley	Aphids in barley	1	1	1990
Crop Protection Online	oat	Aphids in oats	1	1	1990
CropMonitor Pro	Winter wheat	All wheat pests inc. slugs			
CropMonitor Pro	Winter oilseed rape	All OSR pests inc. slugs			
GAIA	Almondso	almond fruit wasp			
GAIA	Grapes	european grapevine moth			
GAIA	Peaches	peach twig borer, summer fruit tortix, peach moth			

- *Are the predictions accurate?*
- *Are the predictions useful?*
- *Is it sufficiently risk averse?*

- *Where/when have they been verified?*
- *Costs/benefits to the farmer?*
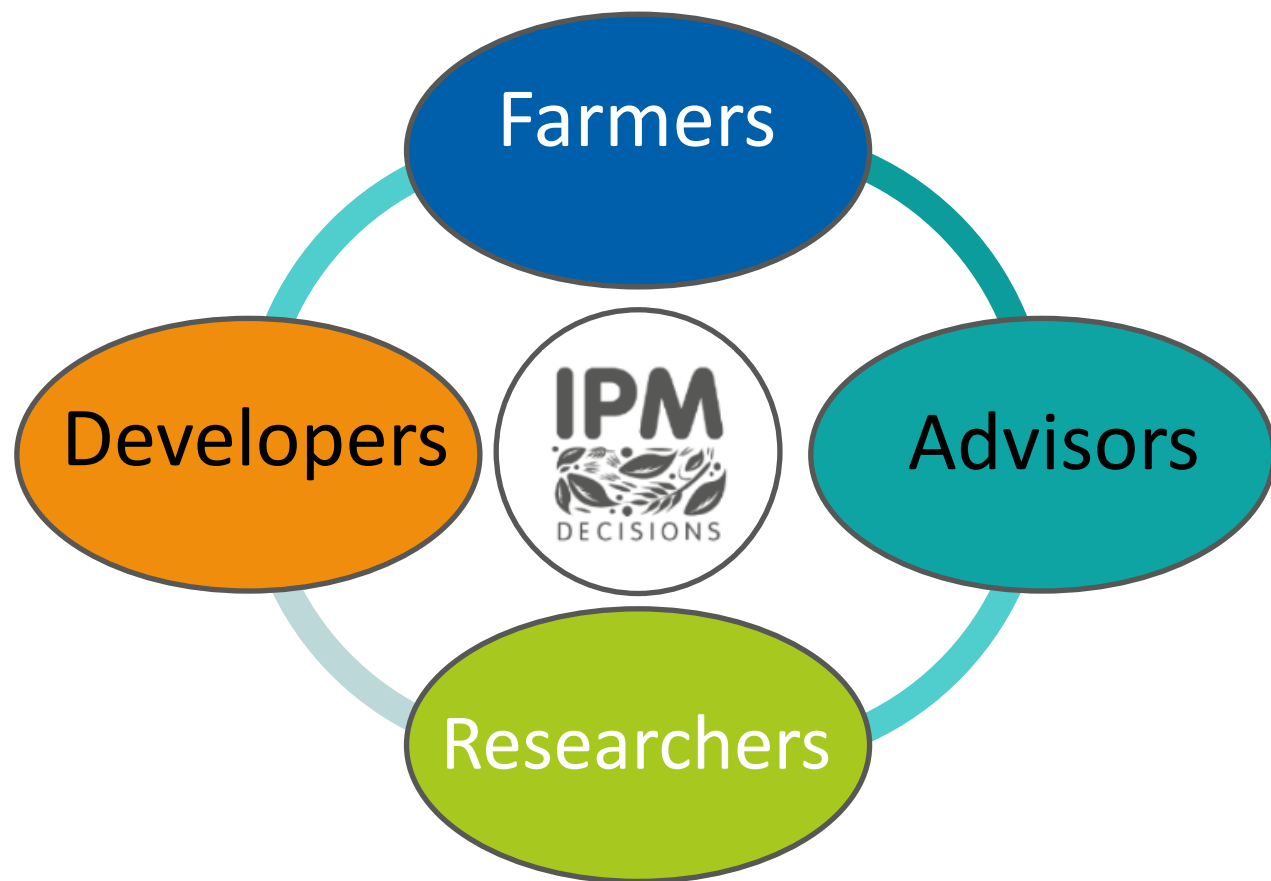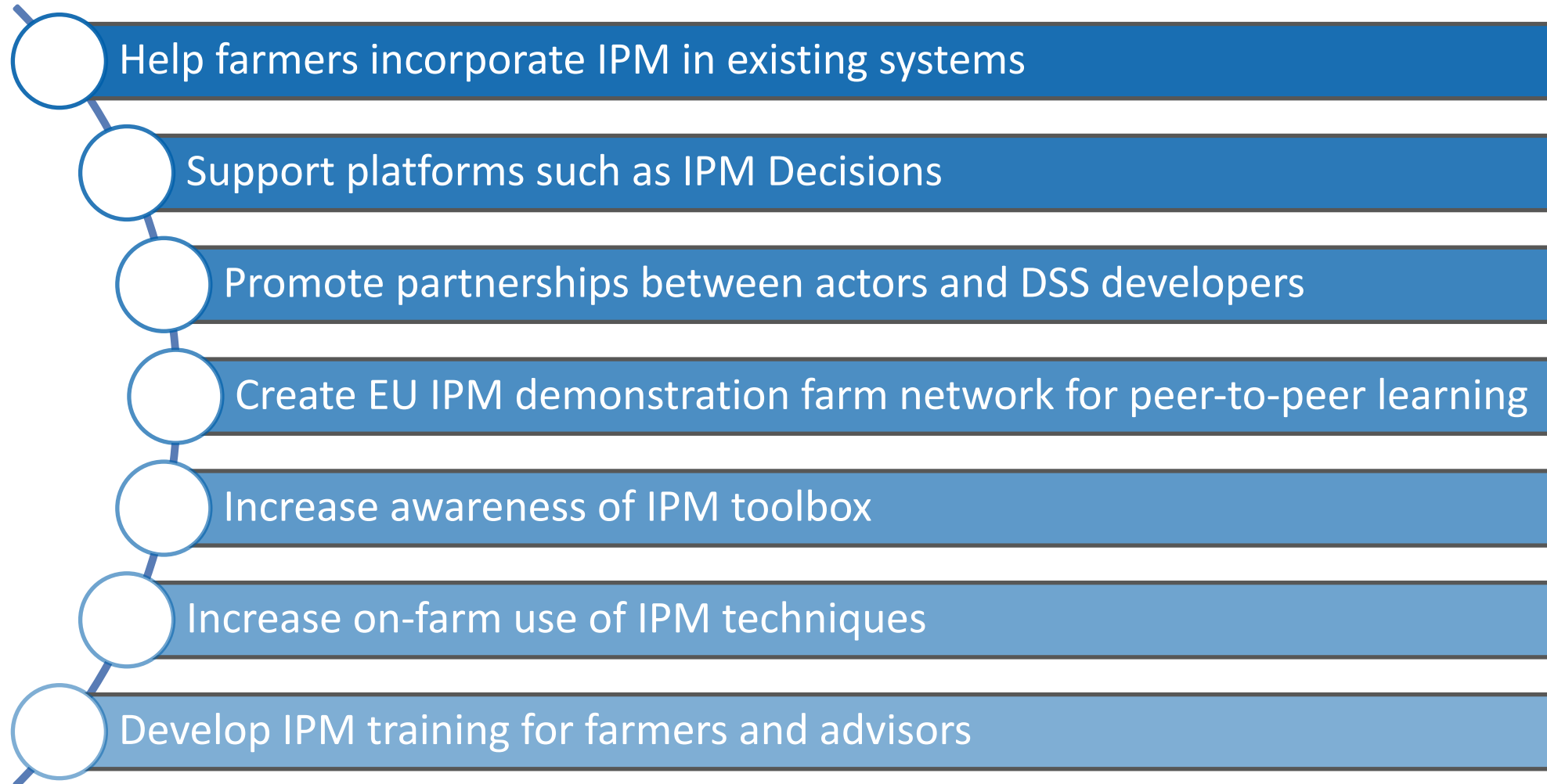- *Costs/benefits to the environment?*

Foster DSS innovation through the Platform, to secure longevity of impact.

European-wide demonstration farm network
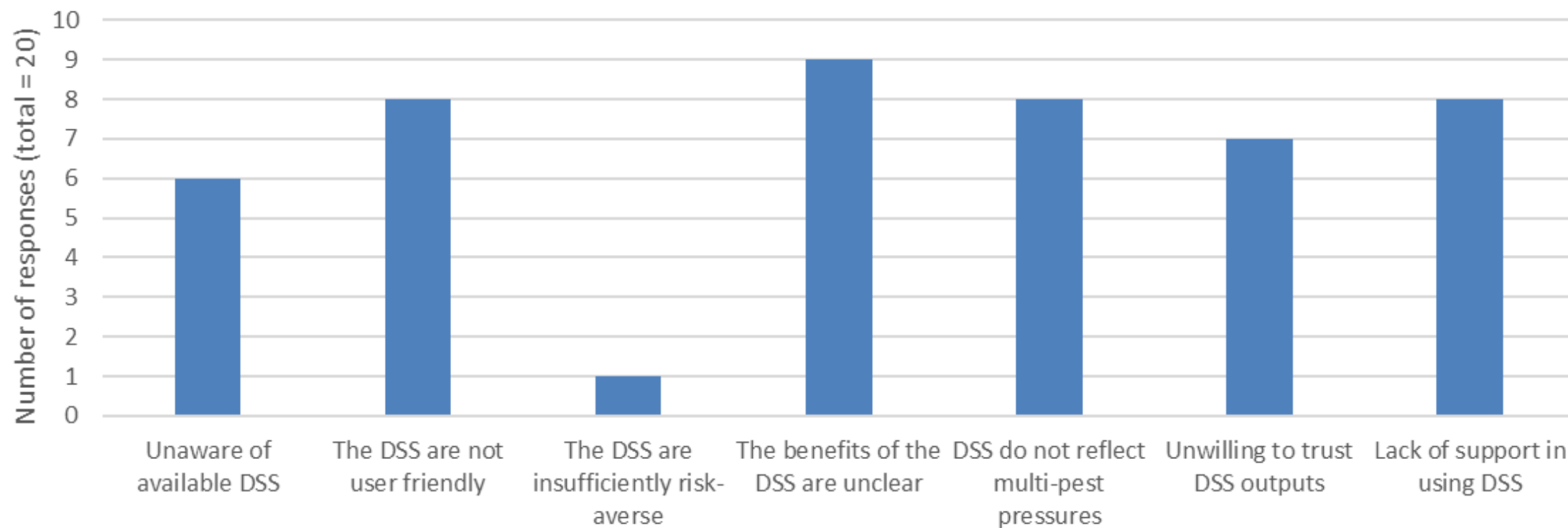*Expected Impacts 2020-2025*

ADAS

- Help farmers incorporate IPM in existing systems
- Support platforms such as IPM Decisions
- Promote partnerships between actors and DSS developers
- Create EU IPM demonstration farm network for peer-to-peer learning
- Increase awareness of IPM toolbox
- Increase on-farm use of IPM techniques
- Develop IPM training for farmers and advisors

Sli.do question responses

What limits the use decisions support systems?

What limits the use of decisions support systems?

- ❑ Unaware of available DSS → *Creating single market place platform*
- ❑ The DSS are not user friendly → *Bespoke dashboards*
- ❑ The DSS are insufficiently risk-averse → *Presenting supporting data*
- ❑ The benefits of the DSS are unclear → *Quantifying benefits*
- ❑ DSS do not reflect multi-pest pressures → *Enabling new DSS*
- ❑ Unwilling to trust DSS outputs → *Presenting supporting information*
- ❑ Lack of support in using DSS → *Creating a IPM Decisions Network*

Project participants