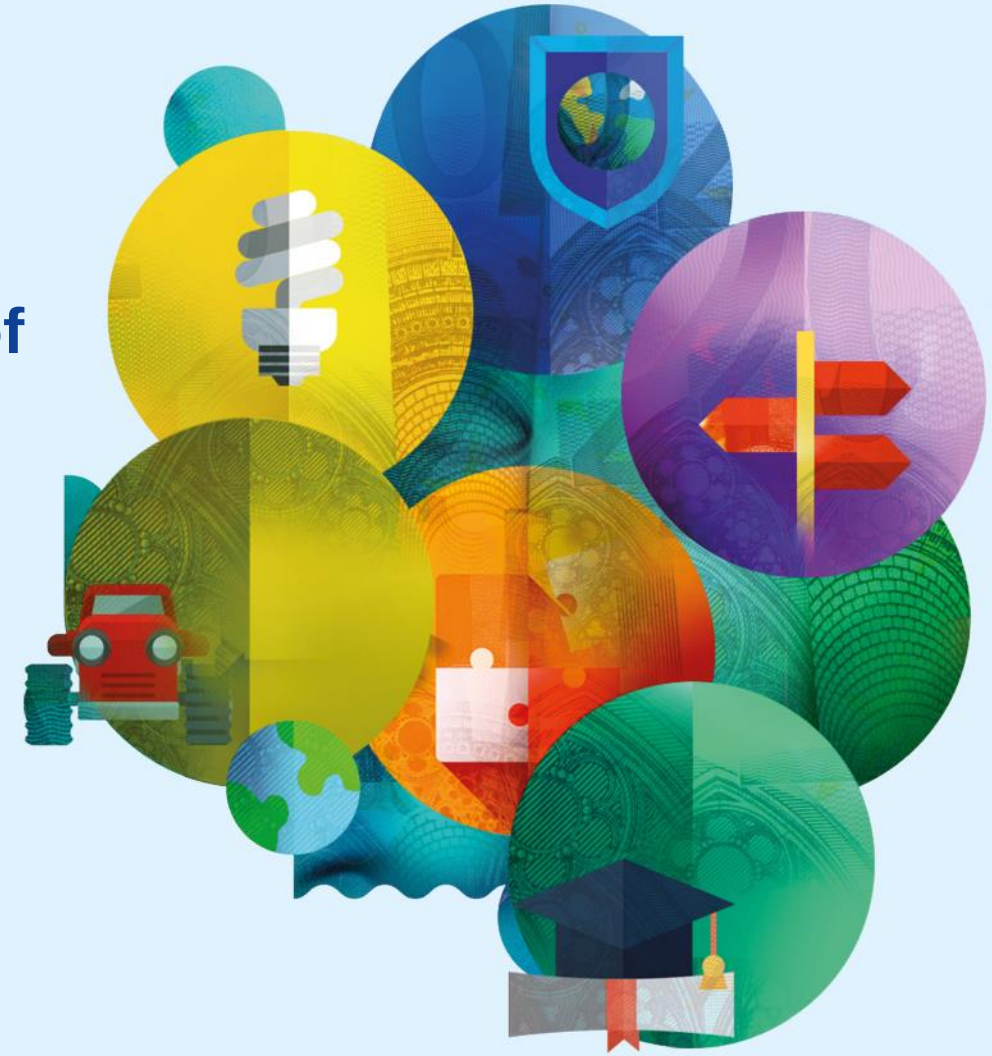
Biocontrols

State of play of the work of DG AGRI on biocontrol solutions for agriculture.

Niall Gerlitz
Brussels, 23 January 2020



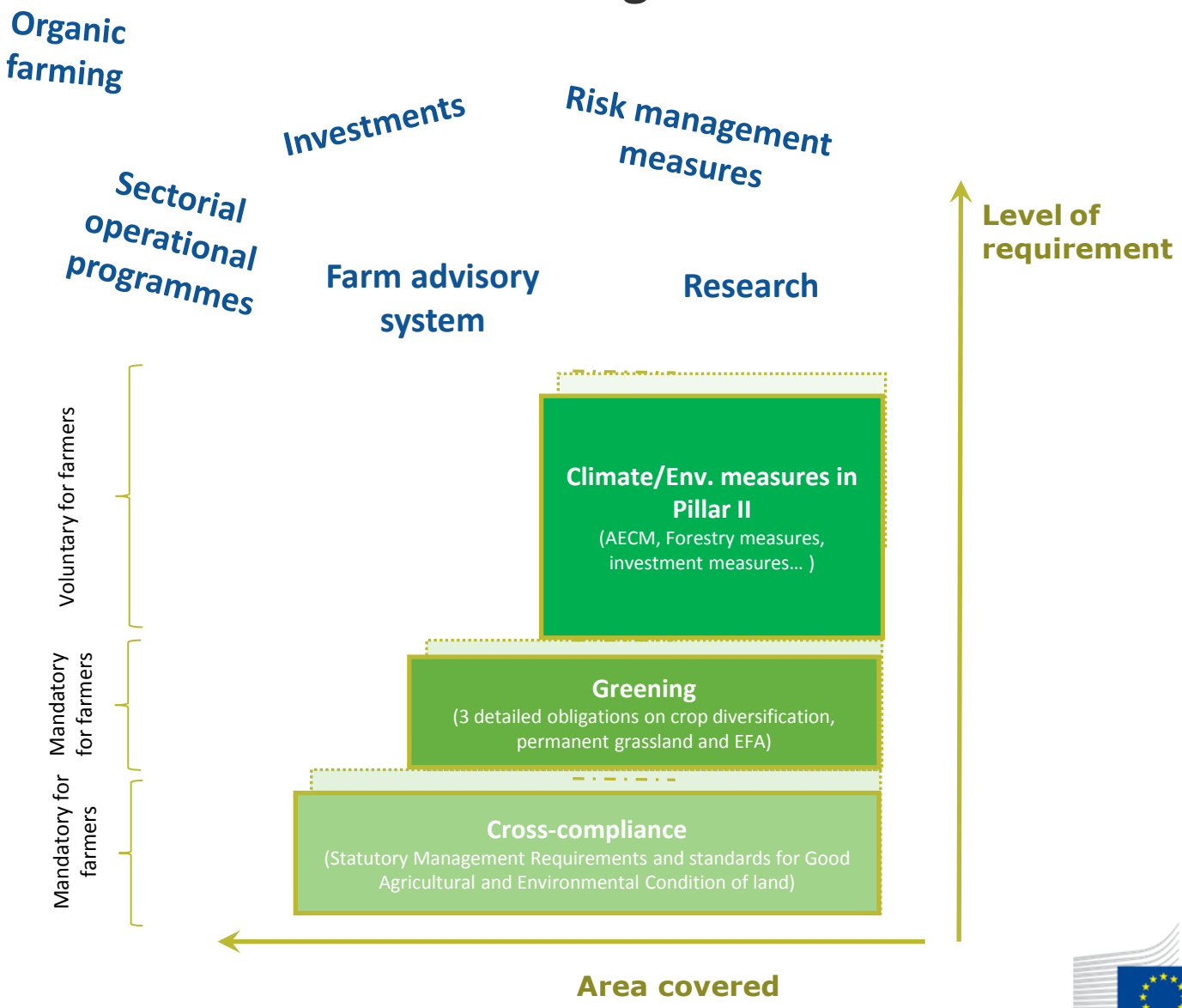
#FutureofCAP

Integrated Pest Management (IPM)

Principle 4

Sustainable biological, physical and other non-chemical methods must be preferred to chemical methods if they provide satisfactory pest control.

The current green architecture



European Commission

Legal Provisions

Current

- Implementation obligatory but Member States decide the way the principles are implemented.

- Not currently part of CAP cross compliance

Agri-environmental and climate measures

- Many measures part of integrated farming (fruits and vegetable, vines and olive are the main crops concerned) encourage replacing certain chemical treatments with biological control methods
- Organic farming!

Green Deal

New CAP proposals

"The strategic plans will need to reflect an increased level of ambition to reduce significantly the use and risk of chemical pesticides,"

Member States describe in their National Action Plan how they ensure the implementation of the principles of integrated pest management, with priority given wherever possible to non-chemical methods of plant protection and pest and crop management.

Horizon 2020 Societal Challenge 2 projects related to innovations in plant protection

Running projects

- **EcoStack** (EU contribution €10M): develop sustainable crop production strategies via stacking of biodiversity service providers and **bio-inspired tools for crop protection**; enhance the impact of **natural antagonists** through biologically-inspired technologies.

- **RELACS** (EU contribution €4M) and **Organic PLUS** (EU contribution €4M): looking at pathways for the replacement and phasing-out of contentious inputs in **organic farming**, including **biocontrol** measures.

More information & research projects to be found on the plant health and ecological approaches & organic farming factsheets and CORDIS.

Many more projects also under MSCA & ERC!

In the pipeline/funding opportunities for innovation in plant protection under Horizon 2020 – Societal Challenge 2

Work programme 2018-2020

- SFS-04-2019-2020: Integrated health approaches and alternatives to pesticide use (total EU contribution envisaged €35M)

Details of the topic:

https://ec.europa.eu/research/participants/data/ref/h2020/wp/2018-2020/main/h2020-wp1820-food_en.pdf

European Commission

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Eidgenössisches Departement für
Wirtschaft, Bildung und Forschung WBF
Agroscope

Weed biological control in Europe

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Classical biological control: importation of specialist natural enemies from the weed's native range to reduce the abundance of a weed in its introduced range

Augmentation biological control: periodic releases of an abundant supply of a native or exotic biocontrol agent over the entire weed population to be controlled

IWMPRAISE - Biological control of the native weed *Rumex* spp.

Biological control agents

- The two clearwing moths *Pyropteron doryliforme* and *P. chrysidiforme* are native to Europe
- Both species were assessed for classical biocontrol of invasive *Rumex* spp. in Australia
- *P. doryliforme* was released and significantly suppressed *Rumex*

Goal: augmentative biocontrol

- Develop a commercial biocontrol product with the European clearwing moths for Europe
- Natural densities in Europe too low – mass rearing and mass releases needed
- Particularly useful for organic production
- Ongoing field trials in Switzerland

THANK YOU!

Further information is available at:

- https://ec.europa.eu/commission/publications/factsheets-long-term-budget-proposals_en
- http://ec.europa.eu/budget/mff/index_en.cfm
- https://ec.europa.eu/info/food-farming-fisheries/key-policies/common-agricultural-policy/future-common-agricultural-policy_en

European Commission