# From specific objectives to concrete interventions on pesticide dependency reductions

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*Civil Dialogue Group on the CAP, 15 October 2019*
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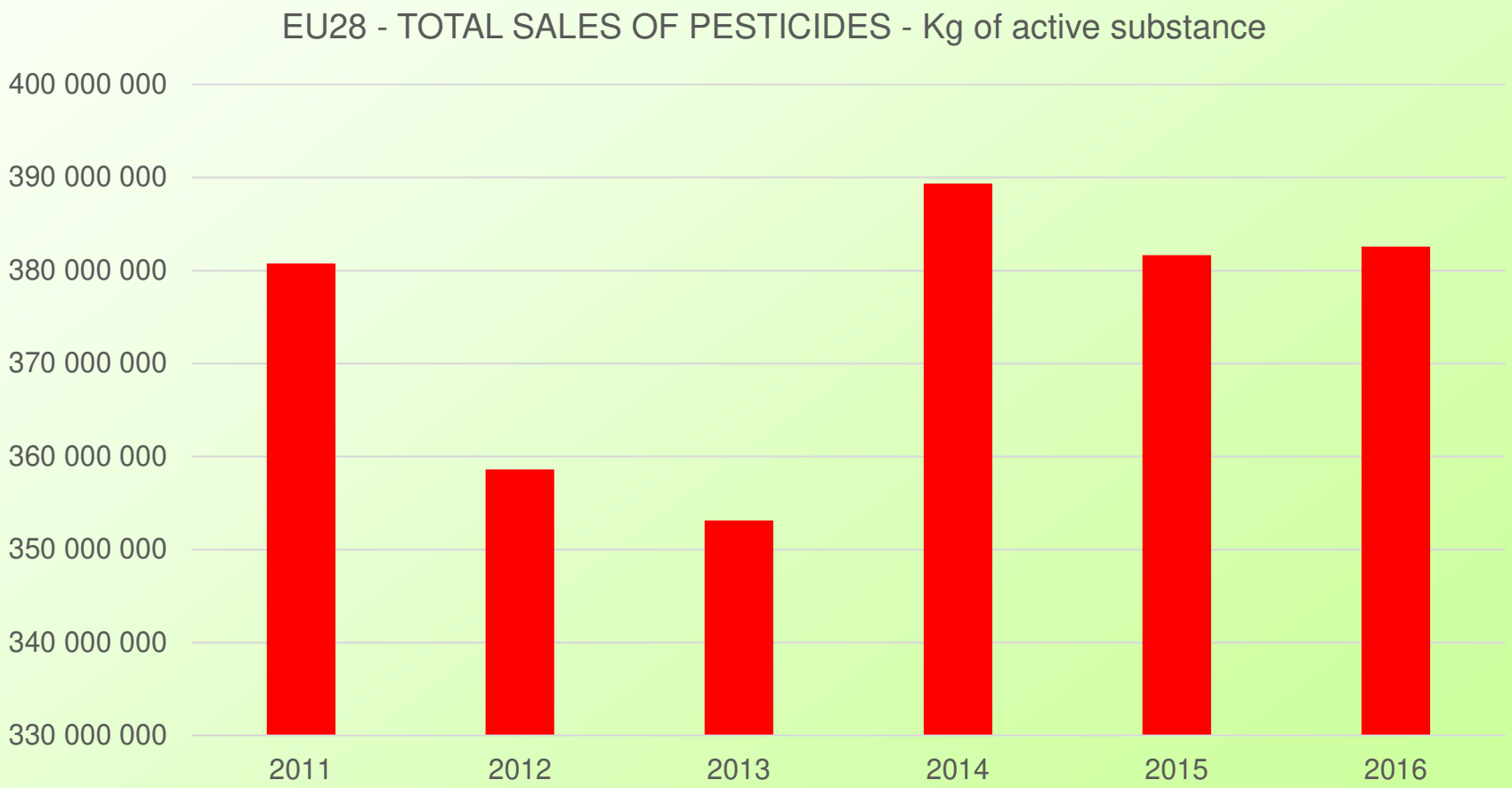
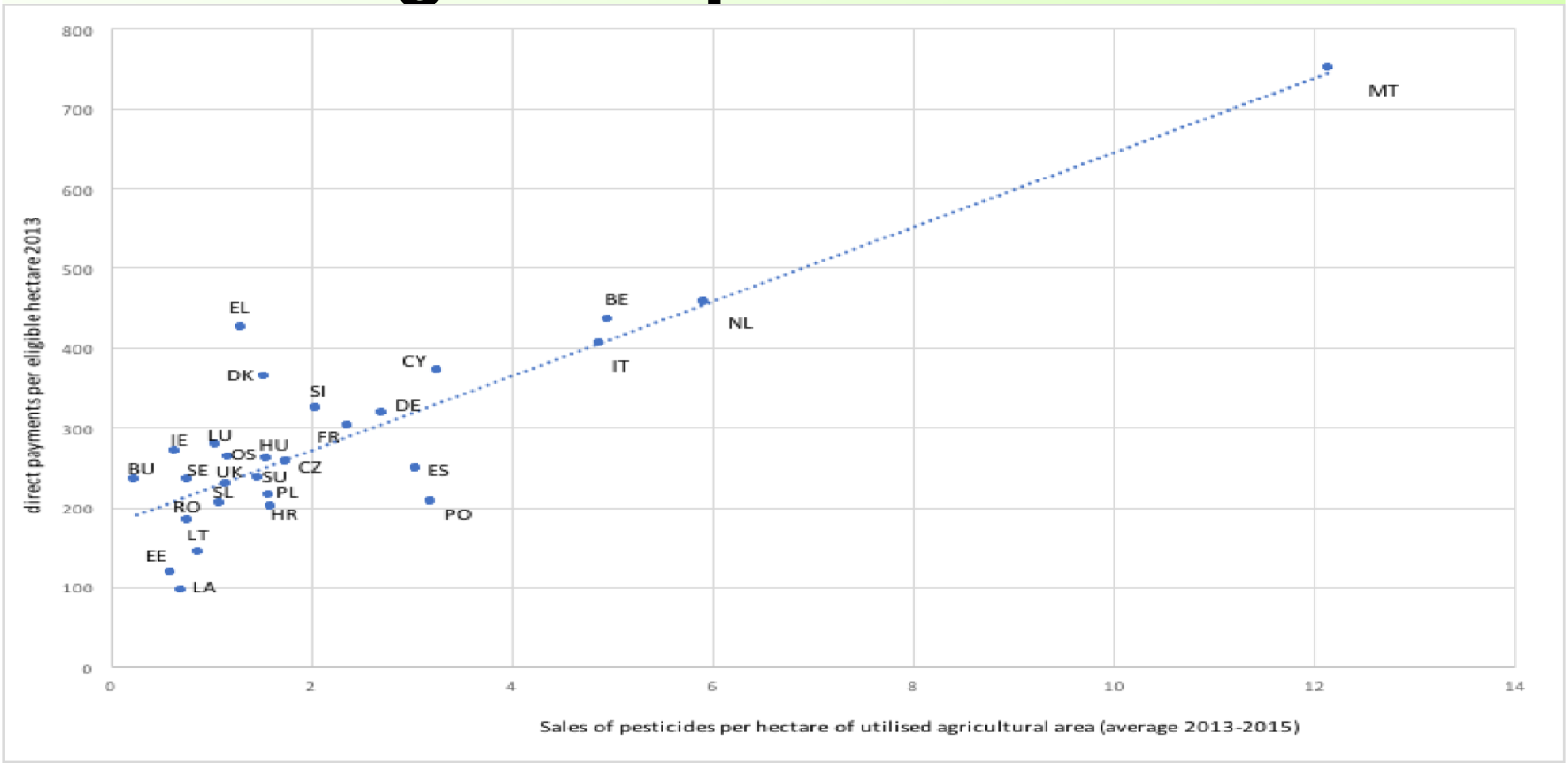
# 1. CAP is not reducing farmers' pesticide dependency




*Source: Eurostat*

# 2. 40 bio €/year distributed in a logic of: Member States receiving the highest direct payments/hectare = MS selling most pesticides/hectare!



# 3. EU objective 2019-24: reduce pesticide dependency

EU mission on agriculture and rural development: *"you should ensure that agriculture and food production contribute to our climate, **environmental and biodiversity goals, notably by reducing the use of pesticides**, fertilisers and chemicals in Europe and beyond."*

# 4a. Written reply to EP from Stella Kyriakides (point 5)

***…I believe we could collectively reflect on the possibility of setting an EU-wide mandatory target on reduction of risk from pesticides.*** *This reflection would be based on the new Commission Report to the Council and Parliament on progress in the implementation of the Sustainable Use of pesticides Directive, and the assessment of the functioning of the recently assessed Harmonised Risk Indicators.*

# 4b. Written reply to EP of Janusz Wojciechowski (annex point 4.6)

*…**I believe we should work together on how to speed up the reduction of dependency,** and how we can do more to encourage swift to lower risk and **non chemical alternatives.***

*..In line with the mission of that president-elect von der Leyen tasked me to with, I am fully committed to engage the **necessary transition of EU farming** towards more sustainability and a **lesser dependence on pesticides.***

# 5. Sustainability

- From baseline

-correct use

-limitations

-integrated approach

- To reduction dependency
- Reduction 50% use

# 6. Everyone talks about sustainability but the real challenge is the reduction from dependency

Benbrook *Environmental Sciences Europe* 2012, **24**:24
http://www.enveurope.com/content/24/1/24


Environmental Sciences Europe
a SpringerOpen Journal

RESEARCH Open Access

## Impacts of genetically engineered crops on pesticide use in the U.S. – the first sixteen years

Charles M Benbrook

**Abstract**

**Background:** Genetically engineered, herbicide-resistant and insect-resistant crops have been remarkable commercial successes in the United States. Few independent studies have calculated their impacts on pesticide use per hectare or overall pesticide use, or taken into account the impact of rapidly spreading glyphosate-resistant weeds. A model was developed to quantify by crop and year the impacts of six major transgenic pest-management traits on pesticide use in the U.S. over the 16-year period, 1996–2011: herbicide-resistant corn, soybeans, and cotton; *Bacillus thuringiensis (Bt)* corn targeting the European corn borer; *Bt* corn for corn rootworms; and *Bt* cotton for Lepidopteron insects.

**Results:** Herbicide-resistant crop technology has led to a 239 million kilogram (527 million pound) increase in herbicide use in the United States between 1996 and 2011, while *Bt* crops have reduced insecticide applications by 56 million kilograms (123 million pounds). Overall, pesticide use increased by an estimated 183 million kgs (404 million pounds), or about 7%.

**Conclusions:** Contrary to often-repeated claims that today's genetically-engineered crops have, and are reducing pesticide use, the spread of glyphosate-resistant weeds in herbicide-resistant weed management systems has brought about substantial increases in the number and volume of herbicides applied. If new genetically engineered forms of corn and soybeans tolerant of 2,4-D are approved, the volume of 2,4-D sprayed could drive herbicide usage upward by another approximate 50%. The magnitude of increases in herbicide use on herbicide-resistant hectares has dwarfed the reduction in insecticide use on *Bt* crops over the past 16 years, and will continue to do so for the foreseeable future.

**Keywords:** Herbicide-resistant crops, Herbicide-tolerant crops, Glyphosate, 2,4-D, Genetically engineered corn, Roundup Ready crops, Biotechnology and pesticide use, Glyphosate resistant weeds

**Each CAP strategic plan should (at least) have 50% pesticide dependency reduction targets by 2027**

# 7. Build on the proposed pesticide indicator

| | |
|---|---|
| Annual Impact indicator (I.27) Sustainable use of pesticides: Reduce risks and impacts of pesticides** | Annual result indicator (R.37) Sustainable pesticide use: Share of agricultural land concerned by supported specific actions which lead to a sustainable use of pesticides in order to reduce risks and impacts of pesticides |

| | |
|---|---|
| Payments management commitments (environment- climate, genetic resources, animal welfare) | Multi-annual output indicator (O.13) Number of ha (agricultural) covered by environment/climate commitments going beyond mandatory requirements |

# 8. Build on the Harmonised Risk Indicators

| Phase | Basis of indicator | Example indicator |
|---|---|---|
| 1 | Hazard<br>(Categorisation of active substances under Regulation (EC) No 1107/2009) | Volume of active substances sold<br>X<br>Weighting of these substances based on their categorisation |
| 2 | Behaviour/Compliance | % sprayers tested<br>% operators trained<br>% containers rinsed and disposed of safely<br>% compliance with IPM<br>Number of Emergency Authorisations<br>Detection of unauthorised substances |
| 3 | Impact | % food samples compliant with Maximum Residue Levels<br>Number of case of acute poisoning<br>% water samples compliant with the Water Framework Directive |

# 9. Devoloping indicators to measure actual pesticide dependency reduction

***Developing of three annual output sub-indicators under O13:***

*•Number of hectares managed by conventional farmers under commitment to reduce pesticide use by at least 50% over a three years period**

*•Number of hectares managed by conventional farmers under commitment to go pesticide free over a three years period (in conversion to organic/agroecology), and*

*•Number of hectares certified organic*

**This indicator could be weighted depending on where these areas are, close to water, to nature, to towns, to organic farmers..*

***Progress should be reflected in three result indicators measuring progress in pesticide dependency reduction at the end of the seven years period:***

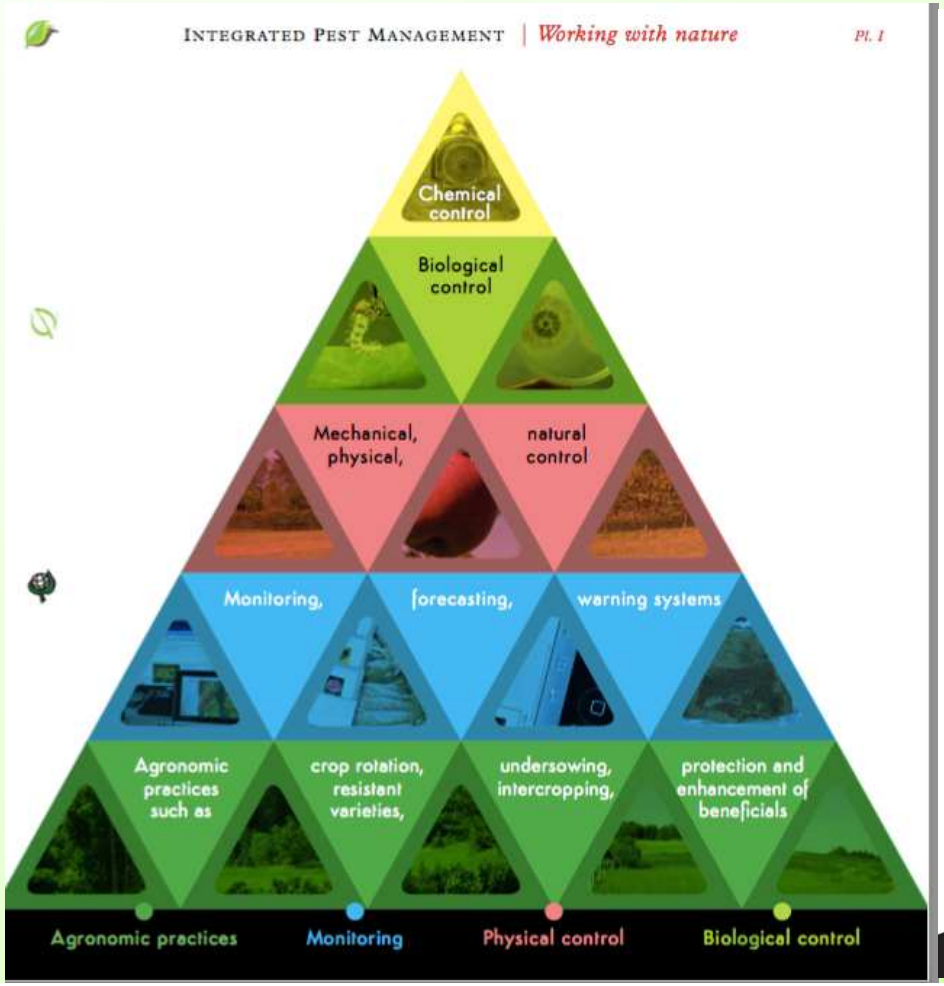
*•Share of agricultural area grown under commitment to reduce pesticide use by 100%*

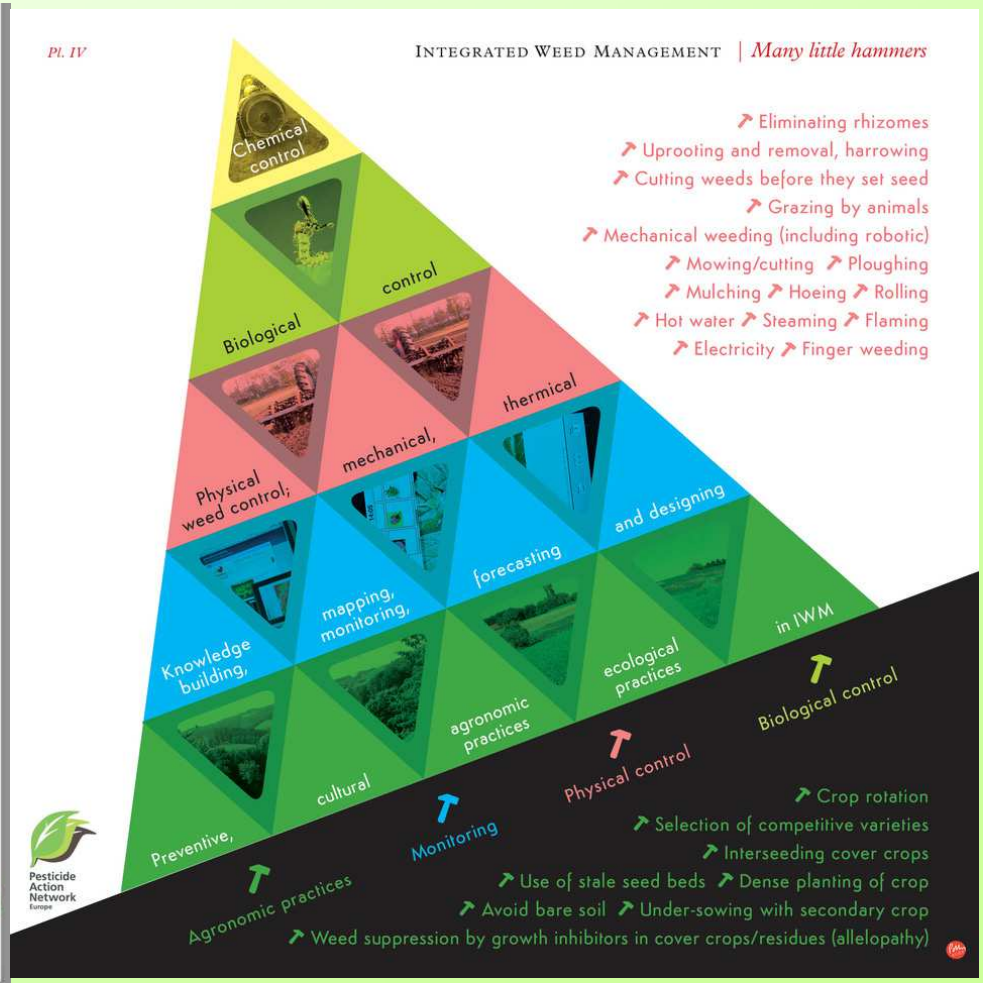
*•Share of agricultural area under commitment to reduce pesticide use by at least 50%*

*•Share of agricultural areas certified organic*

**Impact indicator should measure the actual amounts of pesticides <u>used</u> in the Member State for the period 2021-2027.**

# 10. Interventions: packages of non-chemical alternatives



# 11. For rice the interventions should be focused on soil health

#12

Techniques to Reduce Pesticide Dependency

## Produzione Biologica di Riso

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# 12. The concrete interventions to dependency reduction


- Knowledge for farmer indipendence

C1

- Soil health (indicator)
- Soil alwais covered
- Use dedicate cover crops
- Pasture
- Multi year rotation(2,3,5y)
- Biodiversity zone
- Minimum tillage e false seeding
- Many indicators

## Diapositive 13

**C1** Cons_Irriguo; 14/10/2019






Average yield hectare: 5,5 ton

**Reducing pesticide dependence is a possible route. I don't say this because I read it or heard it, but because I do it.**

**Thank you for your attention**

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