

The background image shows a vast field of bright yellow wildflowers in the foreground, with a dense, reddish-brown soil bank in front of them. Above the field, a clear blue sky is filled with a massive, dense swarm of small, dark insects, likely locusts, flying in all directions. Some tree branches are visible in the upper right corner.

AEIC 2020 Fall Meeting October 13-14

Anti-GMO Disinformation Campaign:  
Past, Present and Future

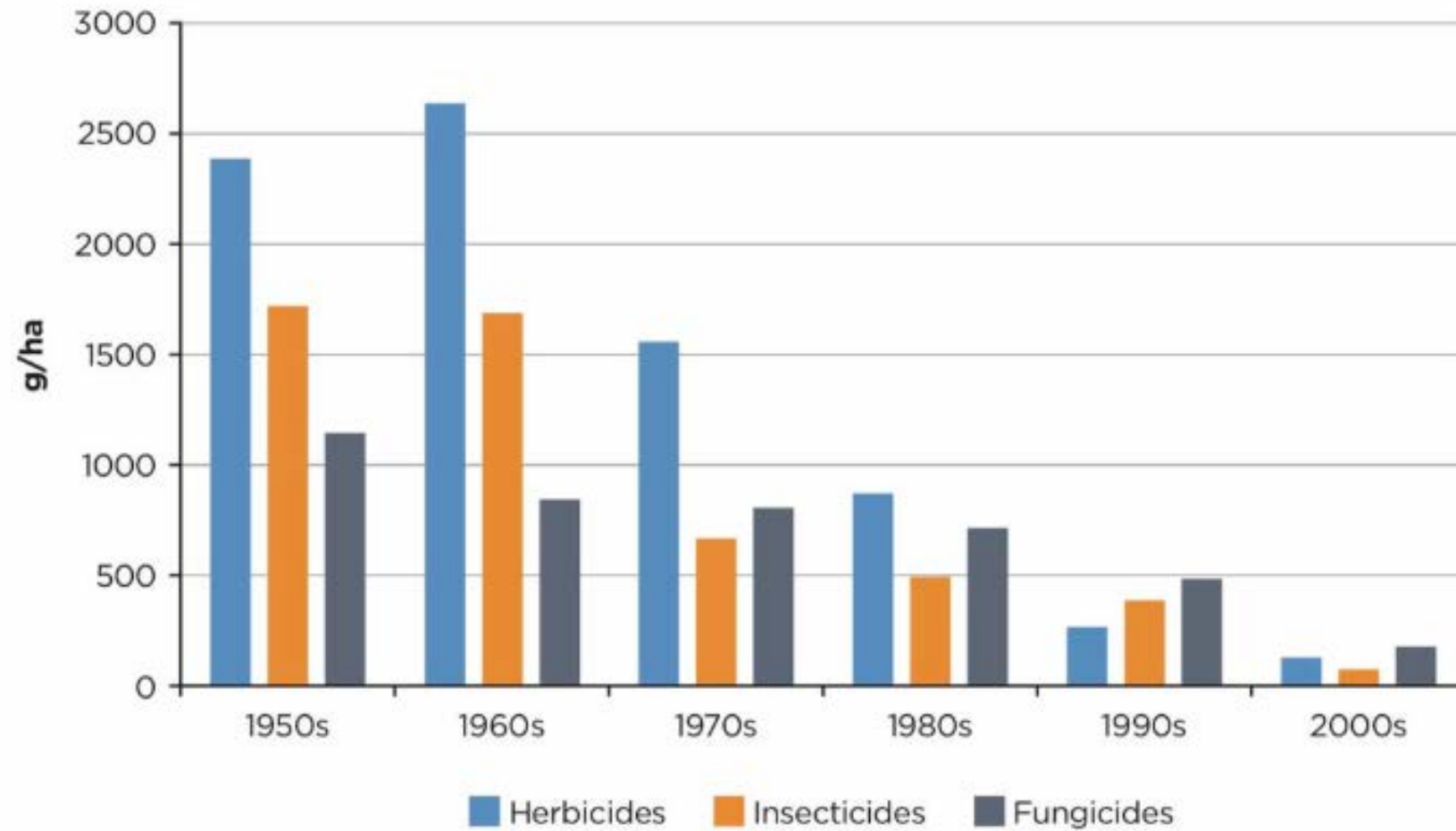
Robert Wager M.Sc.  
Vancouver Island University

**Past**

# Number of People Fed by One Farmer



**Figure 5: Average active ingredient application rates over time**





“We've arranged a global civilization in which most crucial elements profoundly depend on science and technology. We have also arranged things so that almost no one understands science and technology. This is a prescription for disaster. We might get away with it for a while, but sooner or later this combustible mixture of ignorance and power is going to blow up in our faces.”

— Carl Sagan, *The Demon-Haunted World: Science as a Candle in the Dark*

**LIFE IS CHEMICALS**

**ANYONE WHO TELLS YOU  
DIFFERENTLY IS SELLING SOMETHING**

# HAZARD VS. RISK

*POTENTIAL*  
to cause harm

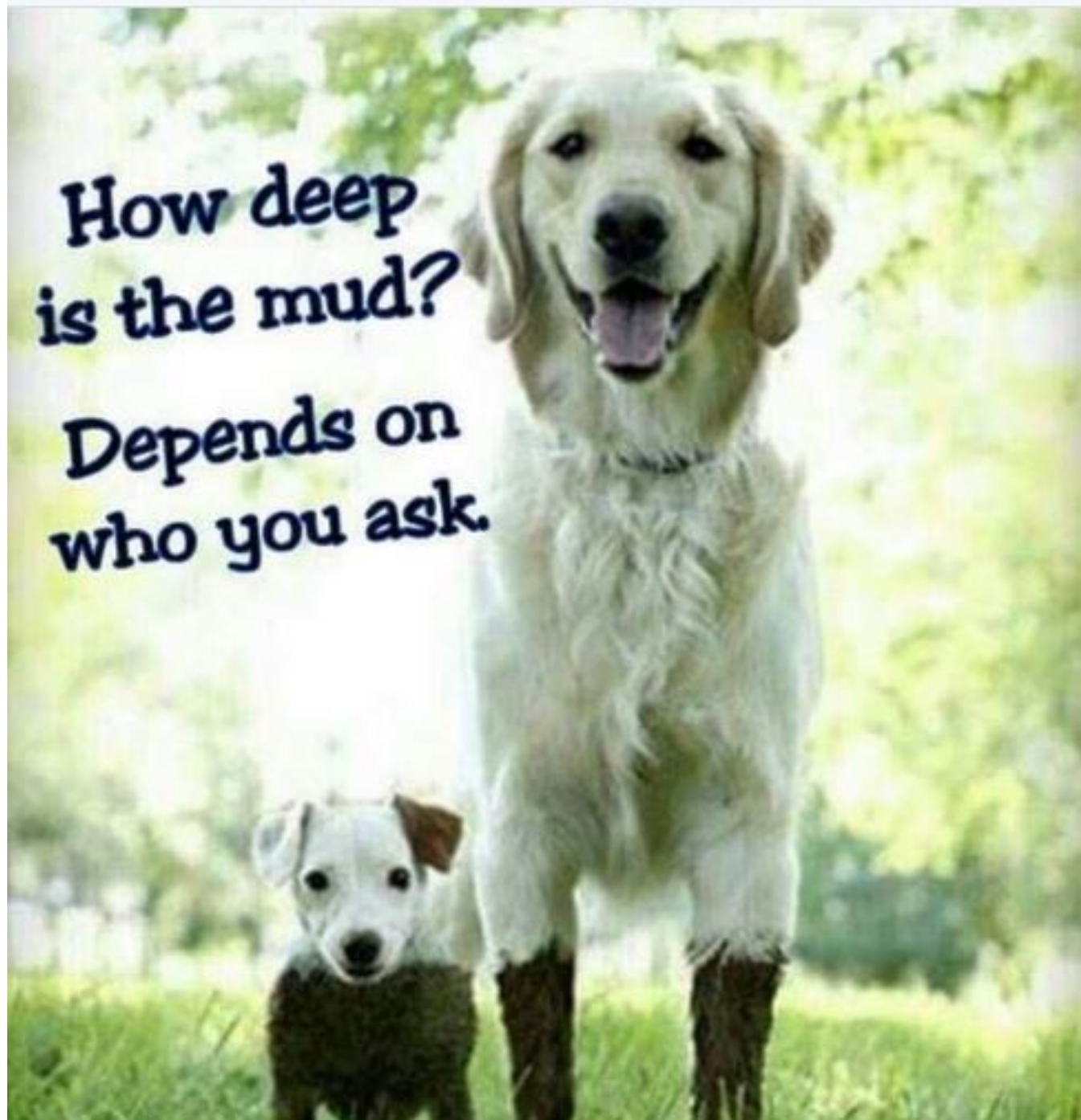
*LIKELIHOOD*  
to cause harm



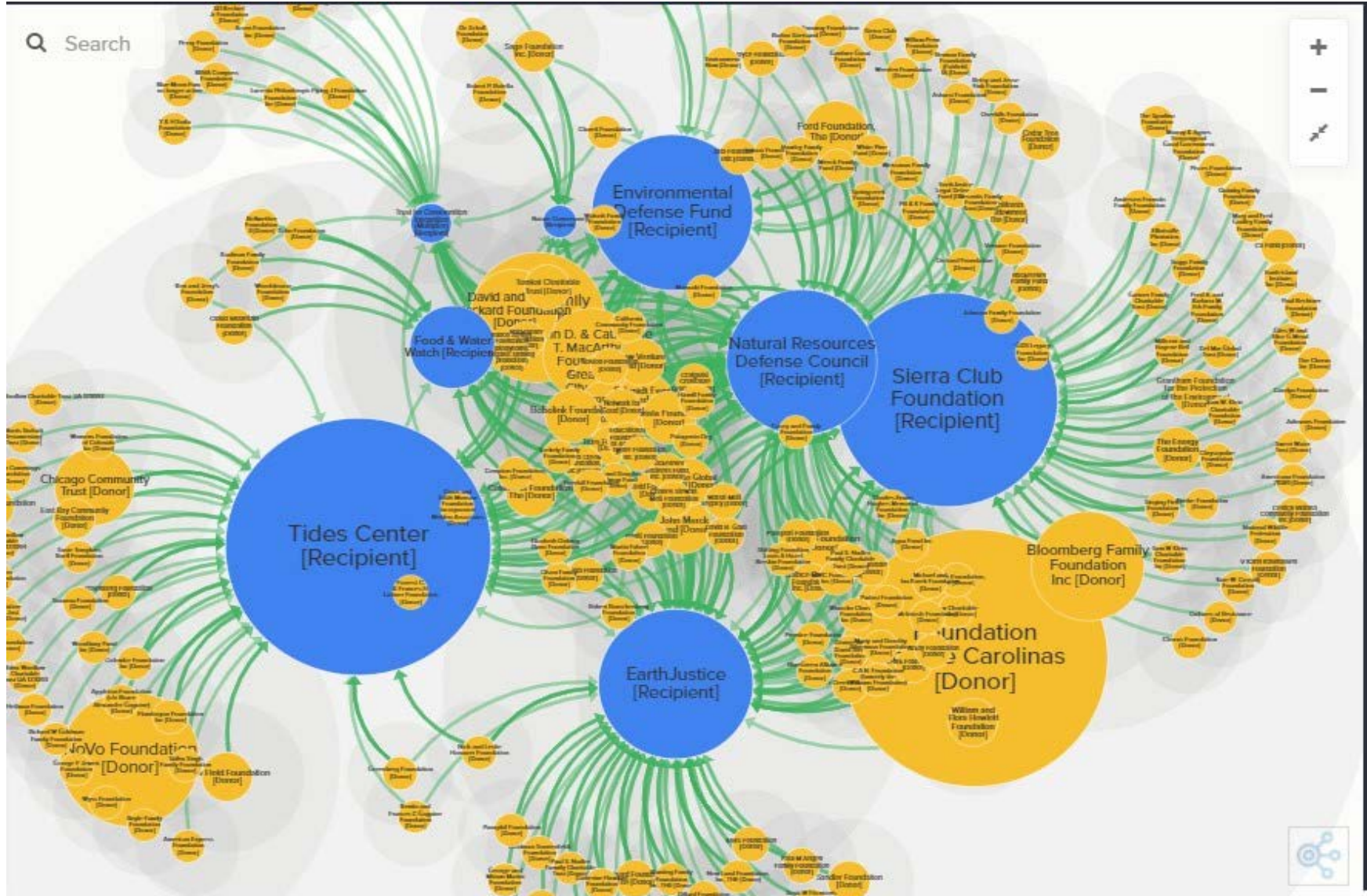
CAMPAIGN FOR ACCURACY IN  
PUBLIC HEALTH RESEARCH

**How deep  
is the mud?**

**Depends on  
who you ask.**



# Genetic Literacy Project Anti Biotech Funding Tracker for North America



# Funding Tracker For Europe

## EU

**2014-2017 >11 Billion Euros to NGO's**



# WHY DO FARMERS CHOOSE GMO SUGAR BEETS? DRAMATICALLY LESS PESTICIDE

**NON-GMO**

**GMO**



**100 oz/acre, 6x  
per year**

**30 oz/acre, 1x  
per year**

IARC MONOGRAPH  
ON GLYPHOSATE

[Q&A on Glyphosate](#)

[Related Links](#)

## IARC Monograph on Glyphosate



A Working Group of 17 experts from 11 countries met at the International Agency for Research on Cancer (IARC) on 3-10 March 2015 to review the available published scientific evidence and evaluate the carcinogenicity of five organophosphate insecticides and herbicides: diazinon, glyphosate, malathion, parathion, and tetrachlorvinphos.

# Glyphosate: scientific consensus vs the French media

	✓	Unlikely to pose a risk for humans - EFSA	Citings 12 %
	✓	Glyphosate not classified as a carcinogen [...] mutagen, or as toxic for reproduction - ECHA	6 %
	✓	Unlikely to be carcinogenic - US EPA	0 %
	✓	Unlikely to be carcinogenic [...] to humans - NZ EPA	0 %
	✓	Exposure to glyphosate does not pose a cancer risk [...] to humans - APVMA	0 %
	✓	Unlikely to pose a cancer risk in humans - PMRA	0 %
	✓	Animal tests show no connection to cancer - RDA	0 %
	✓	No [...] carcinogenicity [...] observed - FSC	0 %
	✓	Unlikely to pose a carcinogenic risk to humans from exposure through the diet - WHO/FAO	0 %
	✓	Exposure [...] through diet does not pose a risk for health - BLV/OSAV	0 %
	✓	Evidence [...] does not permit classification [...] as carcinogenic - ANSES	0 %
	✗	Limited evidence of carcinogenicity in humans - IARC	73 %



**Present**

# ORGANIC FARMING





# Tort Lawyers



**The Tort Honeyvat Equation**  
**(Cancer + Cause) X Company = Compensation**

[www.risk-monger.com](http://www.risk-monger.com) #SlimeGate

A wooden honey dipper is shown dripping honey into a glass jar. The background is a warm, yellowish-gold color.

# The Plaintiff Playbook

Tort Law Firms

\$\$\$

\$\$\$



Emotion



\$\$\$



Jury

Evidence

Outrage



Scientists

Activist NGOs

**Pay scientists to create your evidence;  
Pay activists to create public outrage;  
Create drama on the courtroom stage;  
Collect \$200 Million. "Do not pass Go"!**

**[www.risk-monger.com](http://www.risk-monger.com) #SlimeGate**

## Follow the Money!!!

**Maharishi cult and Scientologists  
are main anti-agritech campaigners**



Litigations are only going to increase unless:

- 1) Learn from glyphosate trial mistakes
- 2) Ensure stories are part of defence (not just numbers)
- 3) It's emotions, coupled with facts that will win the day.



# Utter Madness

- Court of Justice of the European Union (CJEU) ruled that organisms resulting from new mutagenesis techniques (NPBTs) fall within the scope of the EU GMO legislation
- French Decree 20.0268
  - All in vitro mutagenesis breeding to be regulated (read banned)

# europeanseed

VOLUME 5, ISSUE 3

R.I.P.  
EU PLANT  
BREEDING  
INNOVATION

\*20,000 BC  
†25 JULY 2018

A GREAT LOSS FOR EUROPE

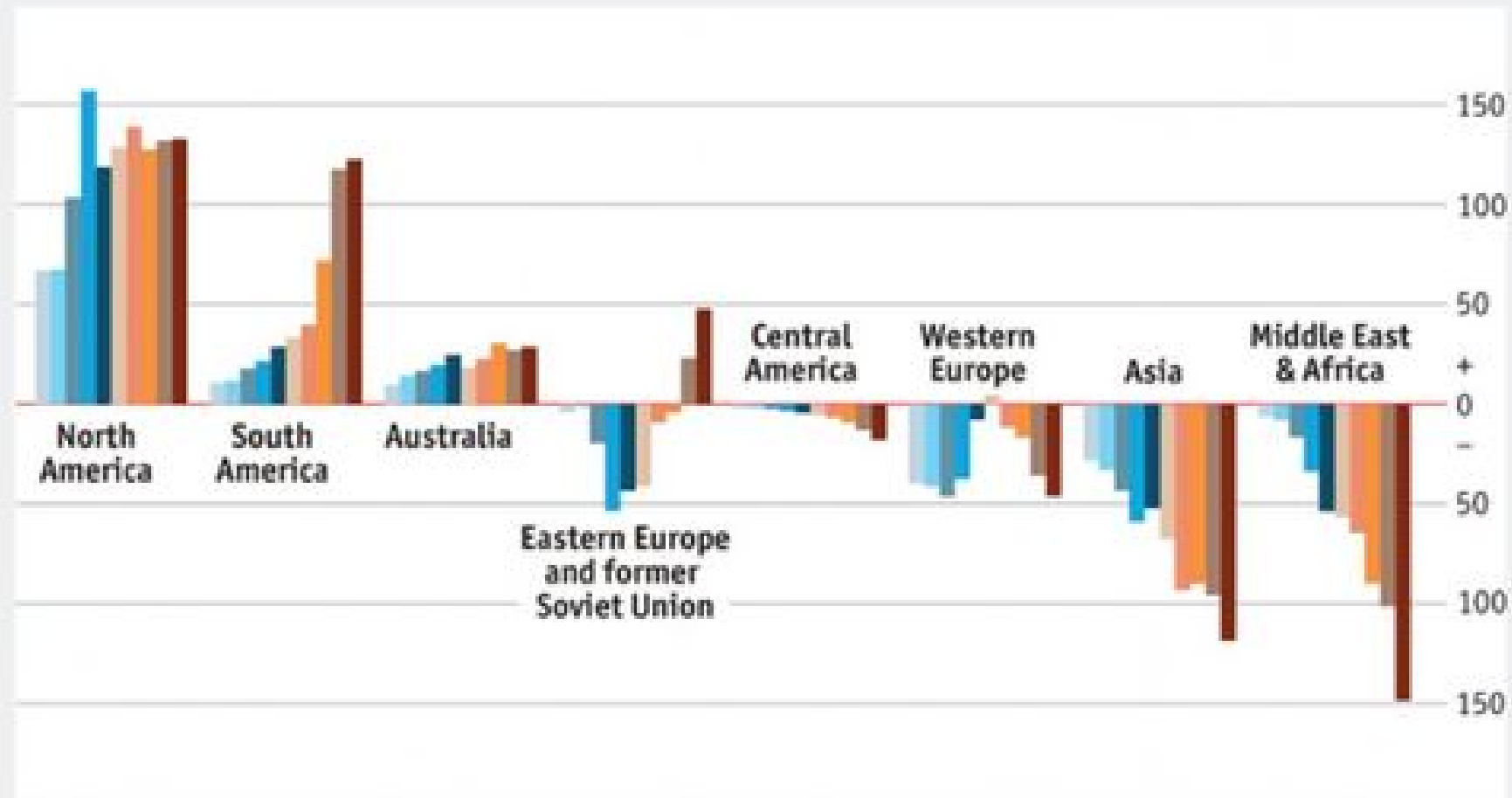


**Future**

## Food\* surpluses and deficits

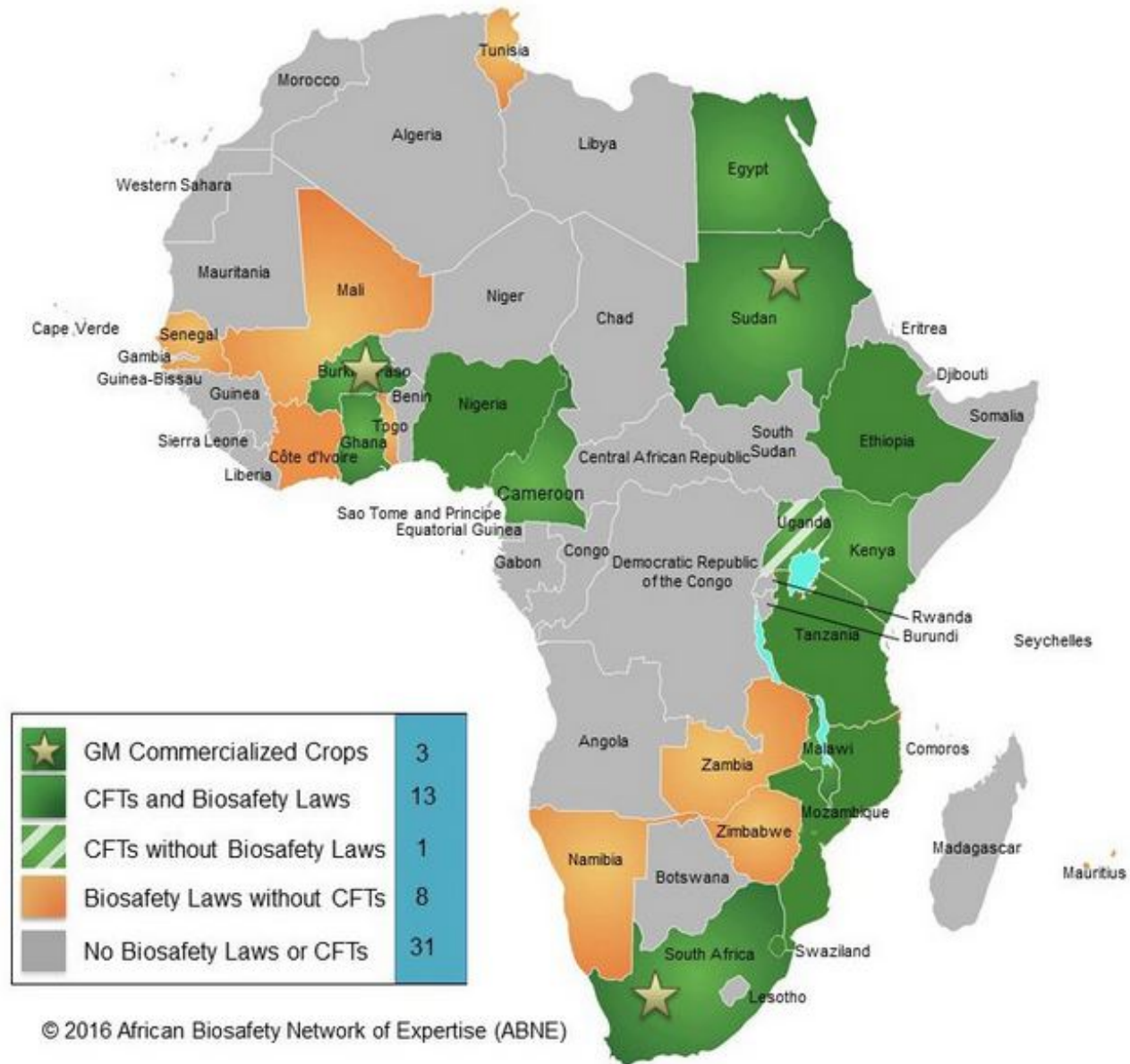
Net intra-regional trade, tonnes, m

1965 1970 1975 1980 1985  
1990 1995 2000 2005 2010

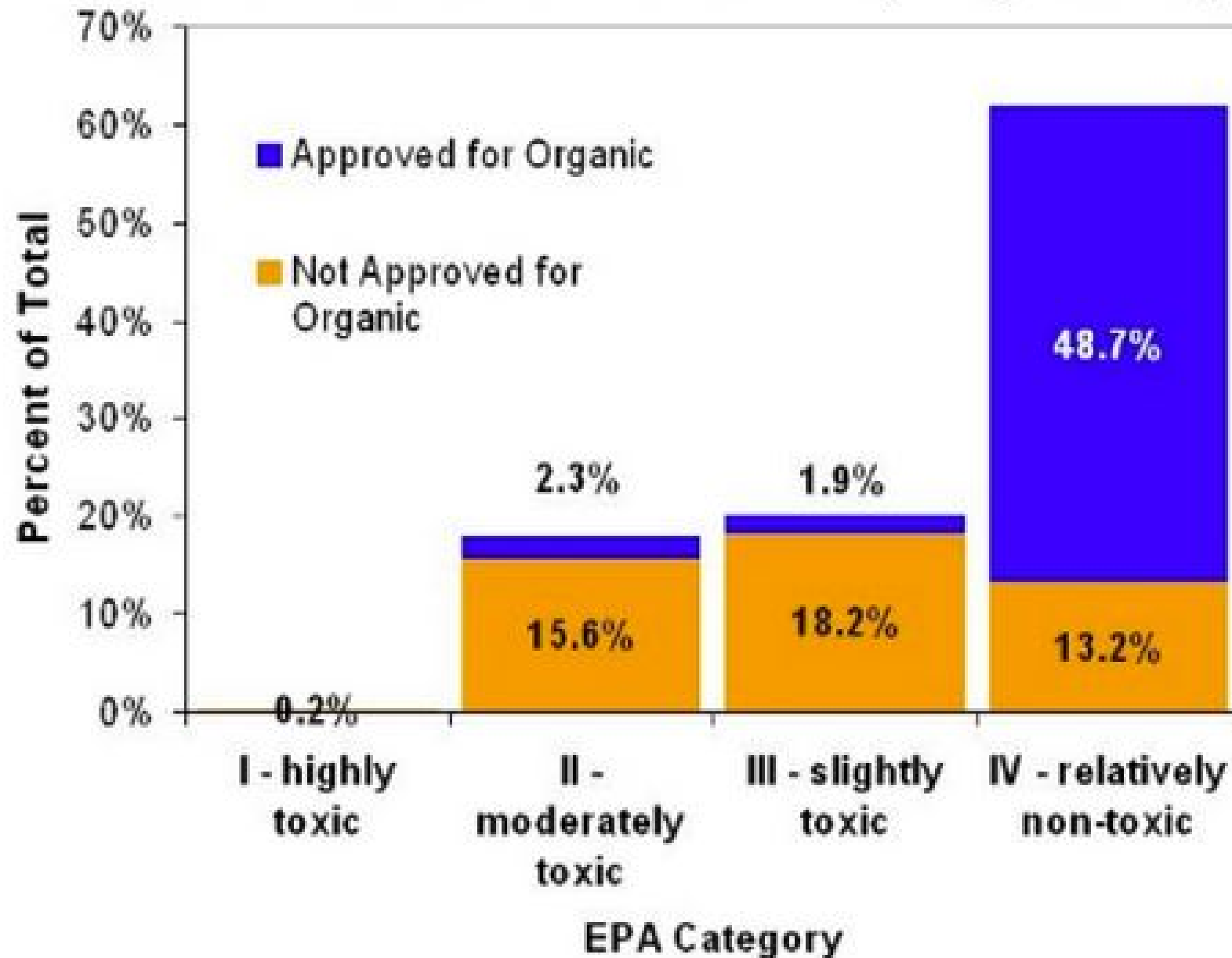


Source: Cargill

\*Cereals, rice, oilseeds, meals, oils and feed equivalent of meat



## California Pesticide Use in 2010 (Weight basis)





Fondation Charles Léopold Mayer  
pour la Paix et la Proximité

## An agroecological Europe in 2050: multifunctional agriculture for healthy eating

### Findings from the Ten Years For Agroecology (TYFA) modelling exercise

Xavier Poux (ASCA, IDDRI), Pierre-Marie Aubert (IDDRI)

With contributions from Jonathan Saulnier, Sarah Lumbroso (ASCA), Sébastien Treyer, William Loveluck, Elisabeth Hege, Marie-Hélène Schwoob (IDDRI)

#### AGROECOLOGY: AN AMBITIOUS AND SYSTEMIC PROJECT

Jointly addressing the challenges of sustainable food for Europeans, the preservation of biodiversity and natural resources and the fight against climate change requires a profound transition of our agricultural and food system. An agroecological project based on the phasing-out of pesticides and synthetic fertilizers, and the redeployment of extensive grasslands and landscape infrastructure would allow these issues to be addressed in a coherent manner.

#### AN ORIGINAL MODELLING OF THE EUROPEAN FOOD SYSTEM

The TYFA project explores the possibility of generalising such agroecology on a European scale by analysing the uses and needs of current and future agricultural production. An original quantitative model (TYFAM), linking on a systemic manner agricultural production, production methods and land use, makes it possible to analyse retrospectively the functioning of the European food system and to quantify an agroecological scenario by 2050 by testing the implications of different hypotheses.

#### PROSPECTS FOR A LESS PRODUCTIVE AGROECOLOGICAL SYSTEM

Europe's increasingly unbalanced and over-rich diets, particularly in animal products, contribute to the increase in obesity, diabetes and cardiovascular diseases. They are based on intensive, highly dependent agriculture: (i) synthetic pesticides and fertilizers—with proven health and environmental consequences; (ii) imports of vegetable proteins for animal feed—making Europe a net importer of agricultural land. A change in diet less rich in animal products thus opens up prospects for a transition to an agroecology not bound to maintain current yields, thus opening new fields for environmental management.

#### SUSTAINABLE FOOD FOR 530 MILLION EUROPEANS

The TYFA scenario is based on the widespread adoption of agroecology, the phasing-out of vegetable protein imports and the adoption of healthier diets by 2050. Despite an induced drop in production of 35% compared to 2010 (in Kcal), this scenario:

- provides healthy food for Europeans while maintaining export capacity;
- reduces Europe's global food footprint;
- leads to a 40% reduction in GHG emissions from the agricultural sector;
- regains biodiversity and conserves natural resources.

Further work is needed and underway on the socio-economic and policy implications of the TYFA scenario.

## SUSTAINABLE FOOD FOR 530 MILLION EUROPEANS

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# Admit 35% Drop in production



**1951:  
10,000 POUNDS OF PIG  
PANCREASES MAKE  
1 POUND OF INSULIN**



**TODAY:  
GENETICALLY  
ENGINEERED  
BACTERIA PRODUCE  
ANIMAL-FREE INSULIN**



What canola fields really look like without neonics: Left has not been treated, while the right has. (Image credit: Gregory Sekulic, Canola Council of Canada Agronomy Specialist)





## Producing Better

The history of corn production plot demonstrates the great strides we have made in producing more with less, and the opportunity we have to continue to "produce better" through tailored solutions that drive us toward our reduced environmental impact commitment while meeting the needs of a growing population on an increasingly hotter planet.



[Home](#) > [Food, farming, fisheries](#) > [Food Safety](#) >

## Food Safety

### FARM TO FORK STRATEGY

Sustainable food production

Sustainable food processing and  
distribution


Sustainable food consumption

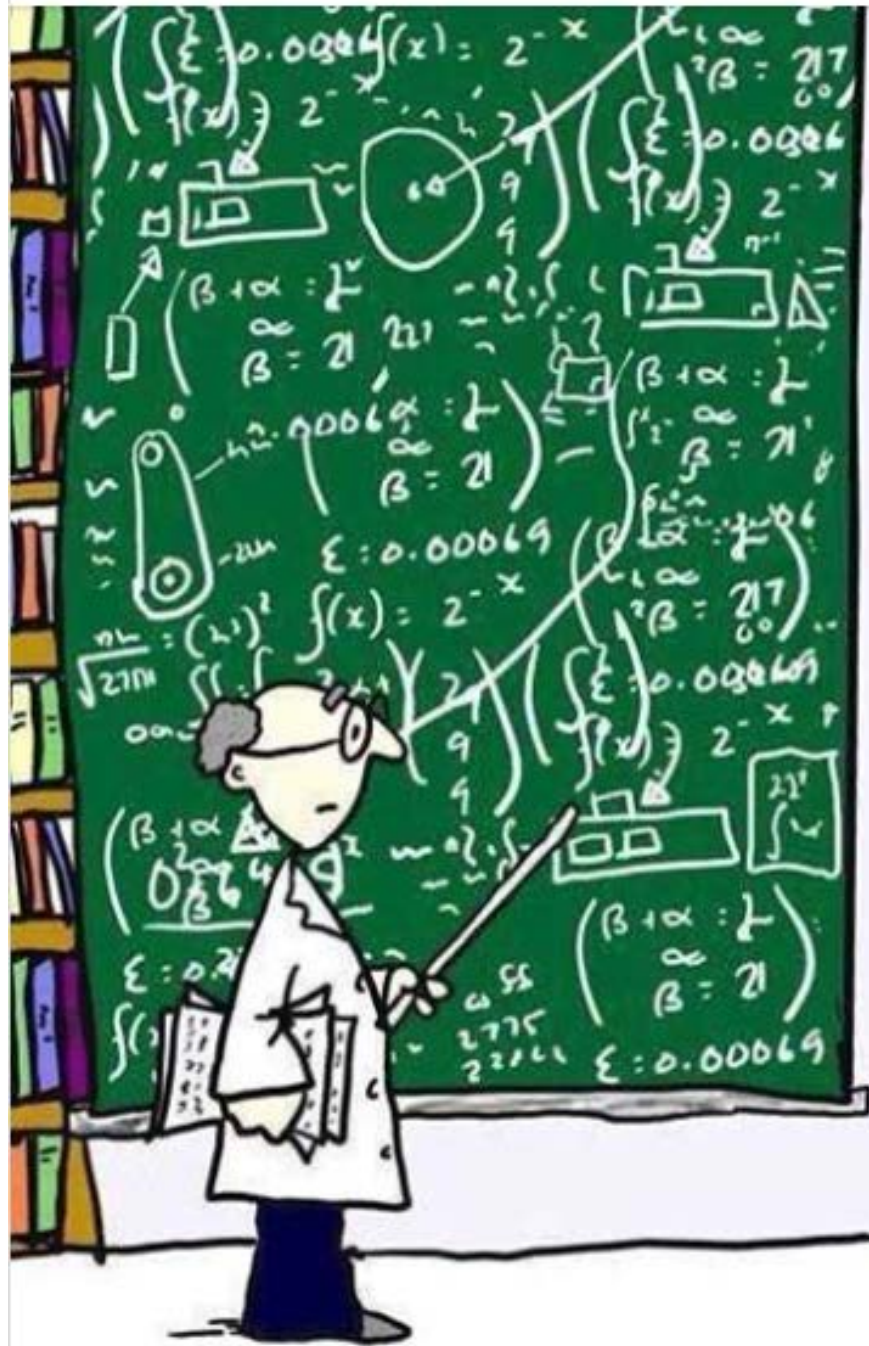
Food loss and waste prevention

Farm to Fork conference

## Farm to Fork Strategy – for a fair, healthy and environmentally-friendly food system

### Strategy

- [Communication - A Farm to Fork strategy for a fair, healthy and environmentally-friendly food system \(+Annex\)](#)
- [The Farm to Fork Strategy - Publication](#) 



NUH-UH. SOME GUY  
ON TWITTER JUST  
SAID YOU'RE WRONG.



MAX EGG





(b)



(e)



(h)



(c)



(f)



(i)



**DUH**

THIS DOES MEANINGFUL FEELING  
2-1-40

DO YOU KNOW WHAT  
THIS STUFF CAN DO  
TO YOU?

YES, HELP KEEP  
ME ALIVE.



OPPONENTS





- Get way more involved in public discussions (on-line in particular)
- Town Hall Meetings
- Dept. of Social Media?
- Do not forget about MSM (for foreseeable future)-Op/Eds, LTTE's
- Never let a inaccurate critical story go unchallenged
- Spend money to counter the Billion\$ spent by Anti-GMO Industry (Tort, antivax, eNGO's, natural food lobby)

# Thank you for listening

