



ELF-EMF exposure & risk perception in the belgian farming community

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NL



FR

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Context



- New high-voltage power lines projects



- Problems with livestock and crop production reported



- Few studies have been conducted on this topic

Objectives

- Learn more about different existing **farmers' opinions**
- **Capture narratives**
- **Make contact** with farmers who are concerned

Survey

- NL + FR
- Pre-tests
- Ethical committee approval
- Online : November 2023 – March 2024



Survey

- Socio-demographic information
- Exposure perception
- Risk perception
- Changes observed



- > 18 years old
- Livestock and/or crops
- Belgium

Communication

- Contact list → email
- Social media, website, newsletter
- Press articles

→ Several reminders sent

Mercredi 24 Janvier
Saint François de Sales

Agri-web

ACTUALITÉS ELEVAGE CULTURE MACHINISME MARCHÉS POLITIQUE AGENDA JOBS DIVERTISSEMENT

Amsterdam en train
des 29€ aller
Réserver

Enquête de Sciensano sur la perception des champs électromagnétiques par les éleveurs et les agriculteurs.
par Benoît GEORGES, le 18 Janvier 2024 20h28
Votre avis compte ! Vous êtes ou connaissez un agriculteur ou un éleveur de bétail ? Participez à l'enquête dès que possible. Le lien est encore accessible:
surveys.sciensano.be/index.php/786518
Plus d'infos sur l'enquête:
www.sciensano.be/fr/coin-presse/que-pensent-les-agriculteurs-et-les-eleveurs-belges-de-lexposition-aux-champs-electromagnetiques

Les plus commentés

| | |
|--------------------|-----------------|
| Natura 2000 | 28 commentaires |
| 2023 année d'enfer | 25 commentaires |
| Natura 2000 | 21 commentaires |

Les plus aimés

le 21 Janvier 2024 07h09

Dire que ce cher Benoît a du y laisser son troupeau laitier. Qu'il a alerté autorités

Landbouwleven

Voorpagina Veeveelt Akkerbouw Mechanisatie Occasies Dossiers Agenda

GRATIS UNIEKE NEW HOLLAND-KOELTAS BIJ UW WINTERONDERHOUD*
*Vraag uw dealer naar de actievoorwaarden.

Veehouders kunnen enquête invullen over elektromagnetische velden
De dienst Risico- en gezondheidsevaluatie van Sciensano lanceert een online enquête bij veehouders en landbouwers om te peilen naar hun perceptie over hun blootstelling en die van hun dieren en/of gewassen aan elektromagnetische velden en de mogelijke risico's die hieraan verbonden zijn (voor de gezondheid en de landbouwproductie).

Waargenomen blootstelling 1

Hieronder volgen enkele voorbeelden ter illustratie van de in de volgende vragen gebruikte termen:

Collectieve elektrische installaties: bovengrondse hoog- en laagspanningsleidingen, ondergrondse hoogspanningskabels, transformatoren, windturbines, enz.

Individuele elektrische installaties (landbouwbedrijven): elektriciteitsmeters, elektriciteitskabels, schakelaars, stroomonderbrekers, robots, automaten, melktanks, fotonvoltaïsche apparatuur, enz.

Collectieve telecommunicatiesystemen: antennes, glasvezel, zendmasten, enz.

Individuele telecommunicatiesystemen: GSM, Wi-Fi, enz.

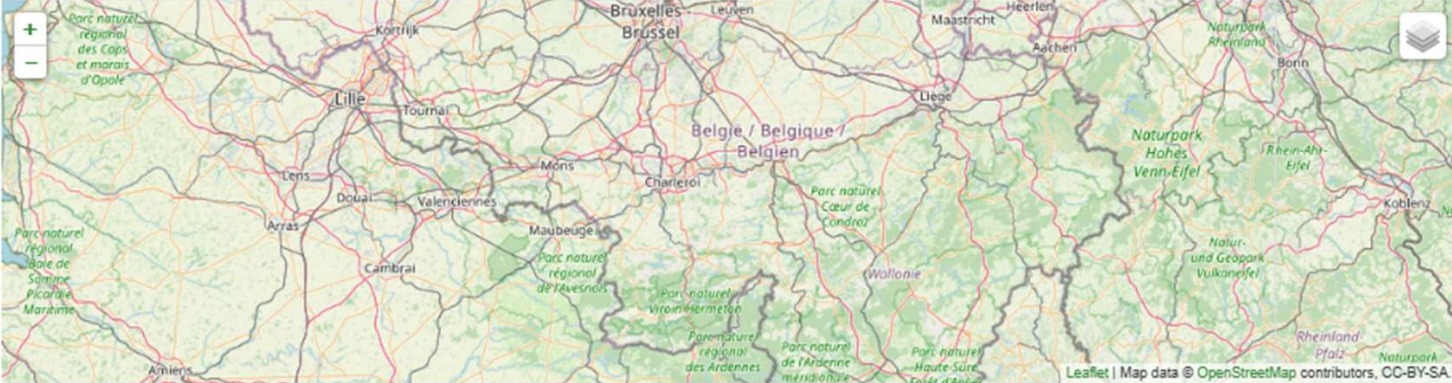
Wijs op de volgende kaart een 1e locatie op uw bedrijf aan (buiten en/of binnen).

Q

☐ Restrict search place to map extent

Latitude:

Longitude:



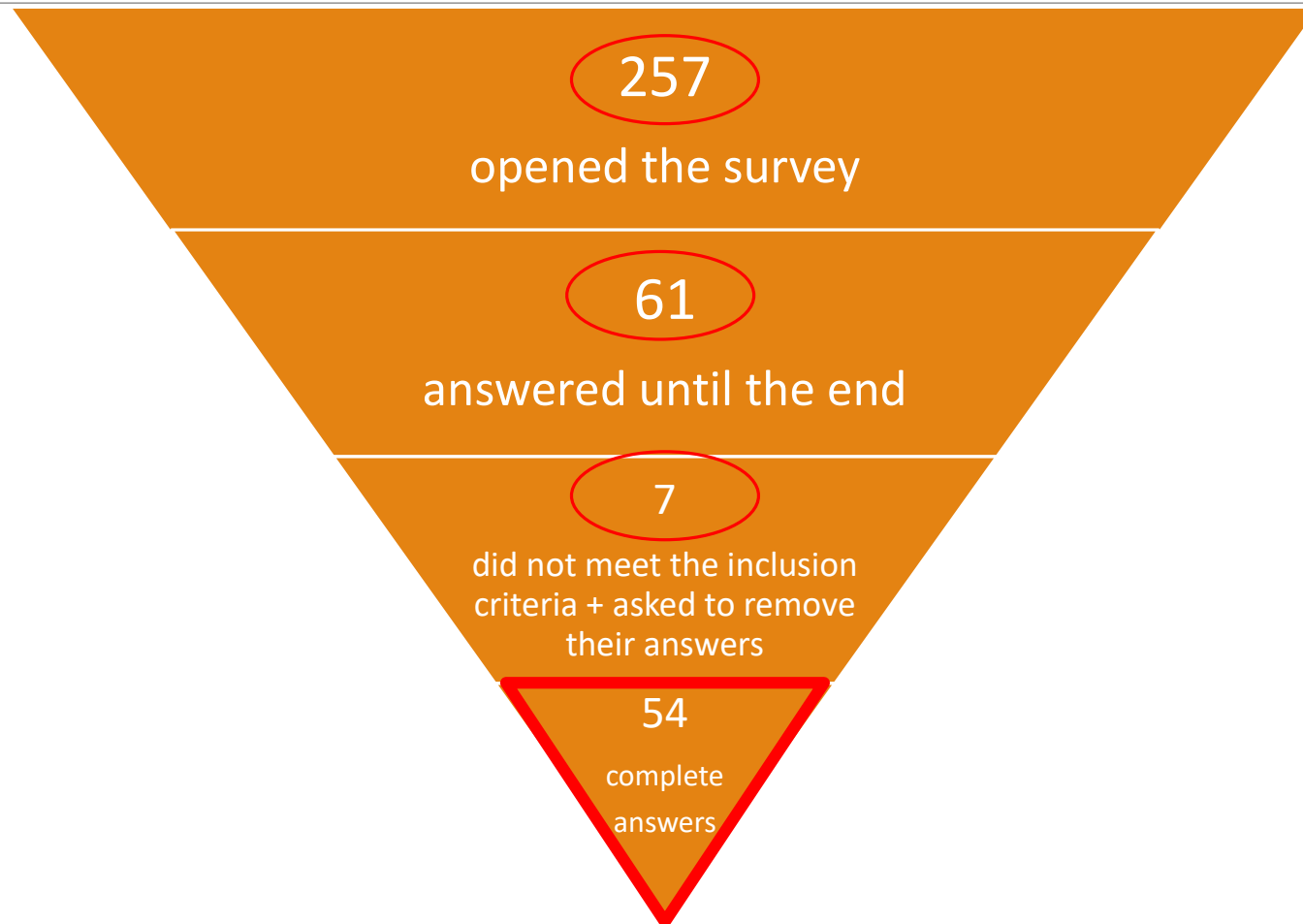
+

-

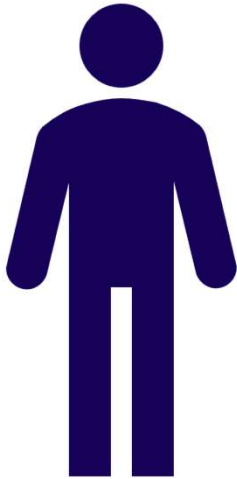
⌵

Klik om de locatie in te stellen of sleep en verplaats de pin. U kunt ook de coördinaten invoeren

Number of answers



Respondent profile



From Wallonia (62%)

Aged 45-54 years (41%)

Head of the farm (83%)

Animals & crops (55%)

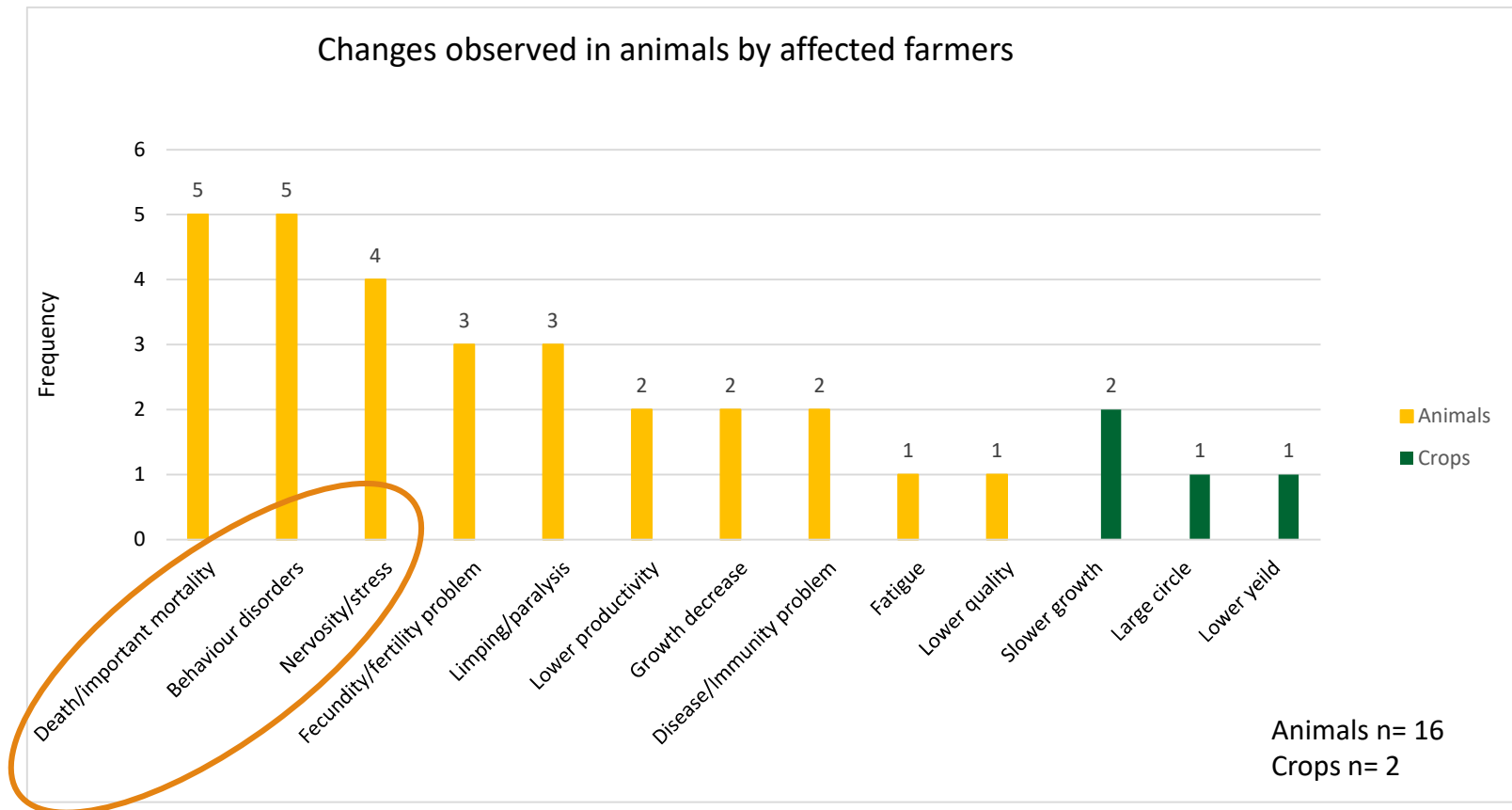
Affected farmers

= farmers who **reported negative changes** in their animals or crops, that they attributed to EMF infrastructures.

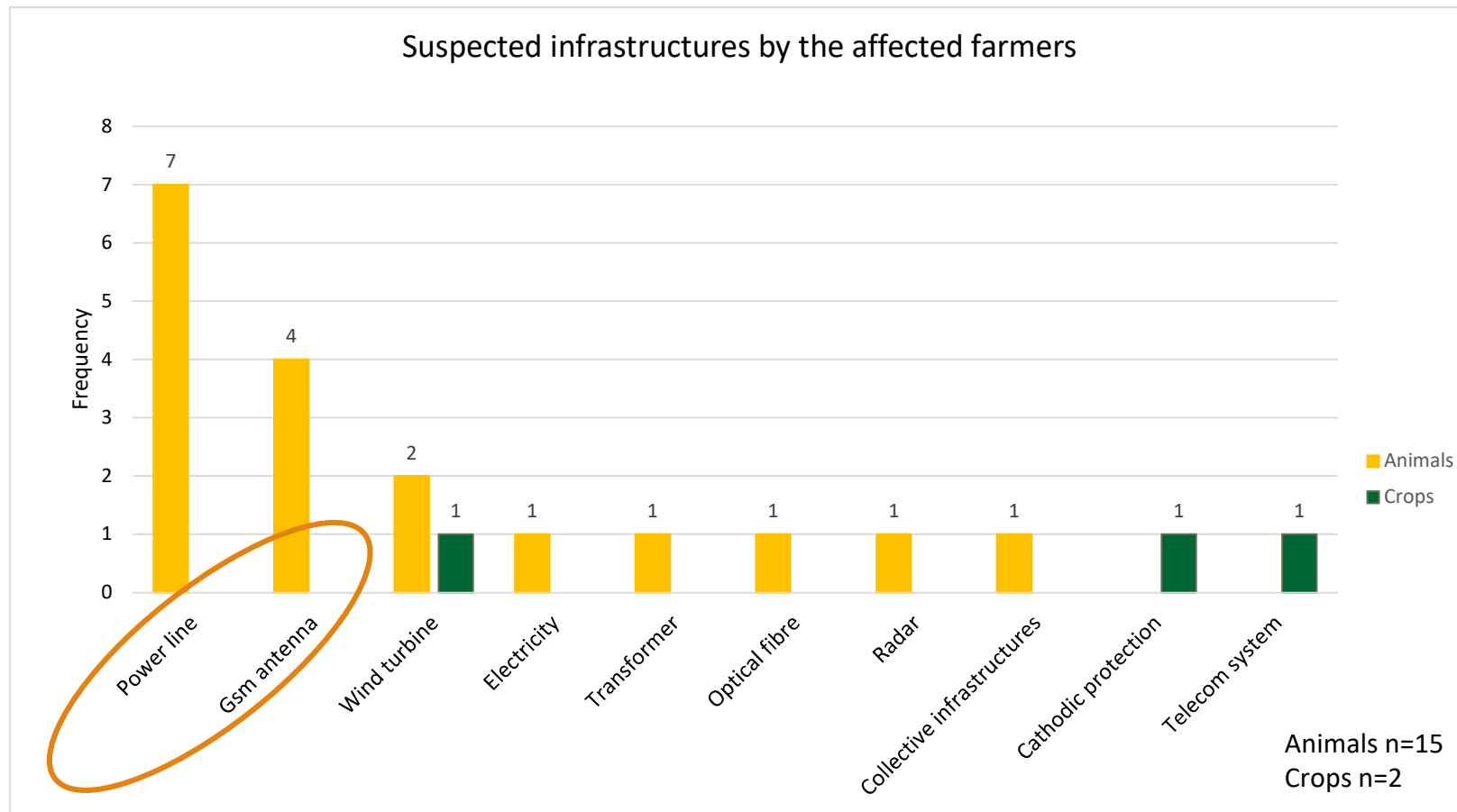
➔ **18 breeders and 2 farmers**

n= 54

Negative changes observed

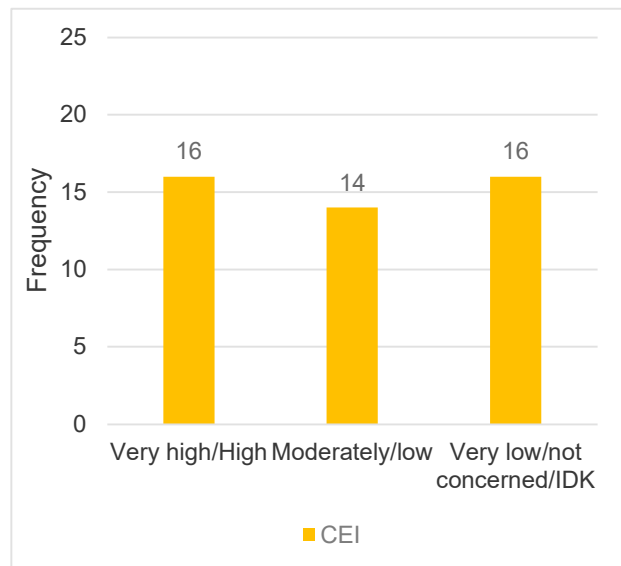


Suspected infrastructures

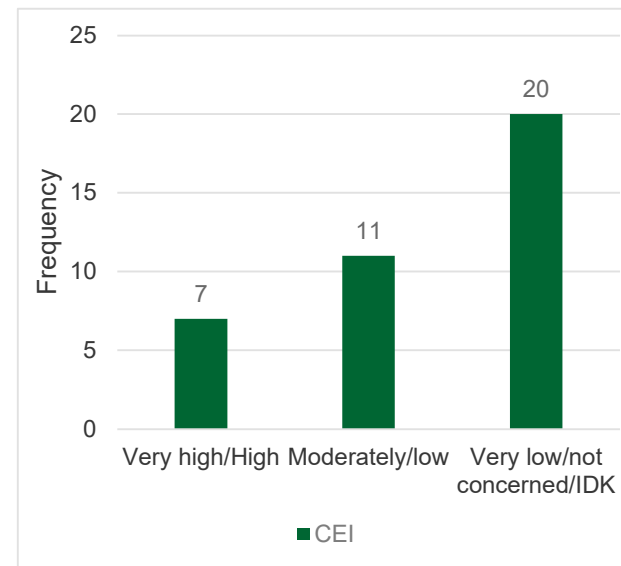


Exposure perception, CEI

Respondents' exposure perception of animals to EMF from CEI



Respondents' exposure perception of crops to EMF from CEI



Crops are less exposed than animals ?

Animals n= 46

Crops n= 38

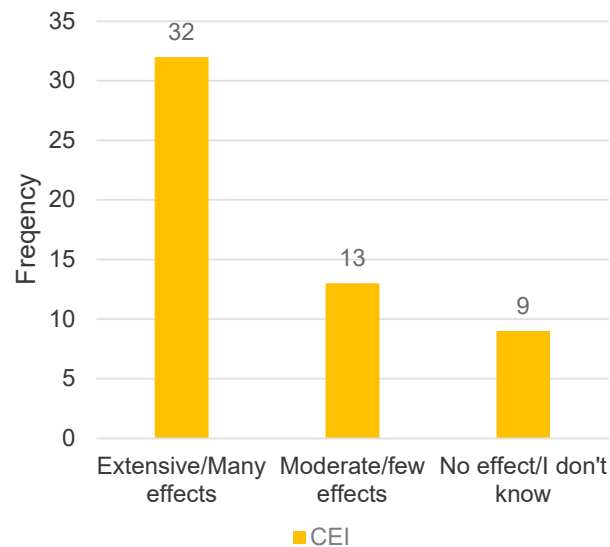
CEI = Collective Electrical Infrastructure

Risk perception

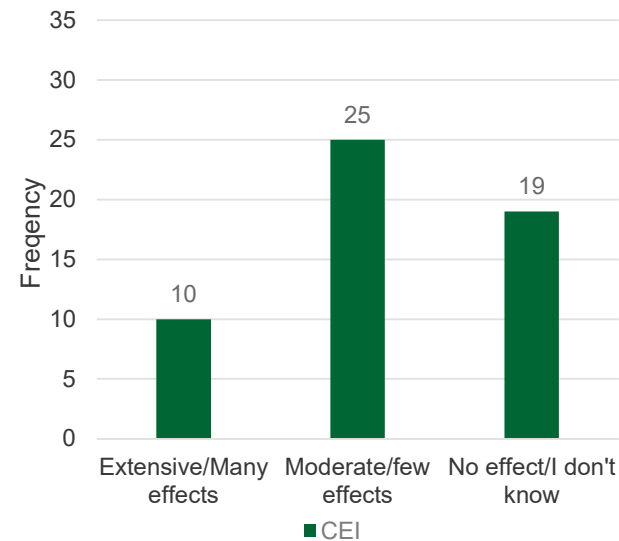
- Perceived effects
- Worries
- Perceived control
- Perceived scientific knowledge

Perceived effect

Perceived effects of EMF from CEI on animals



Perceived effects of EMF from CEI on crops

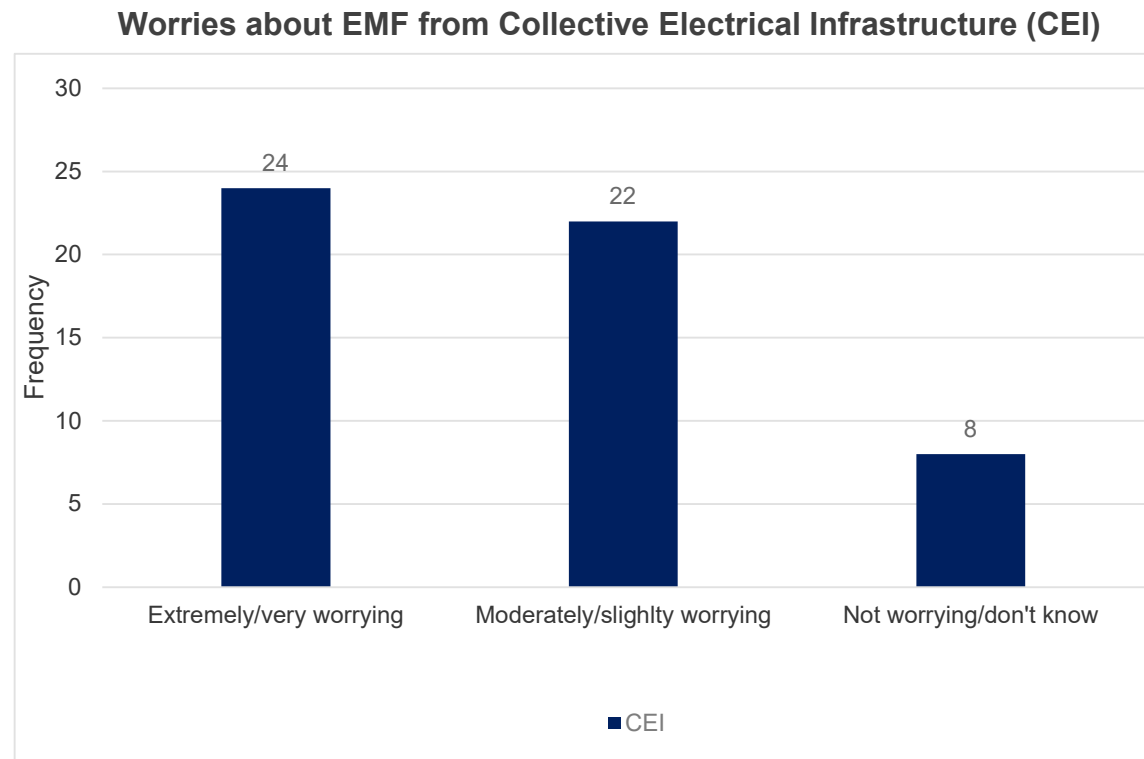


A lot of effects on animals, less on cultures ?

CEI = Collective Electrical Infrastructure

Animals n= 54
Crops n= 54

Worries, CEI



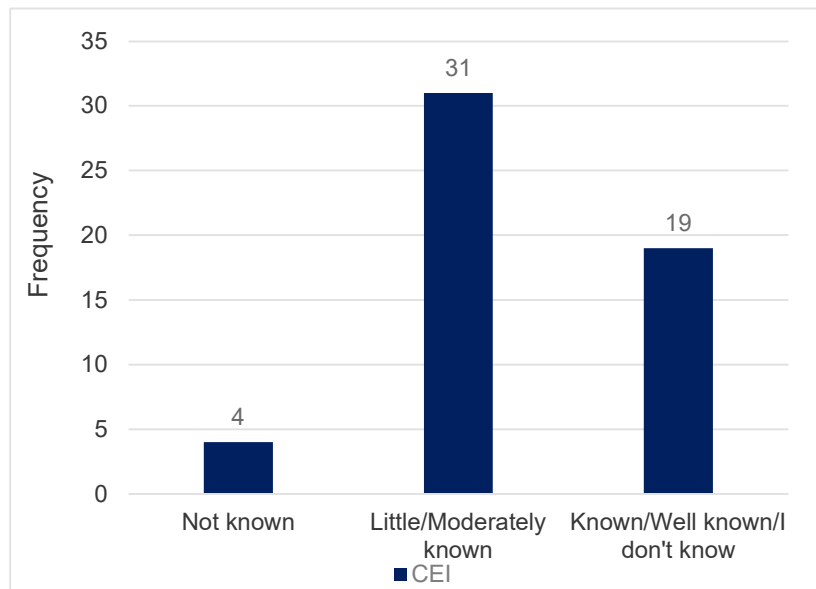
➞ Worried

n= 54

CEI = Collective Electrical Infrastructure

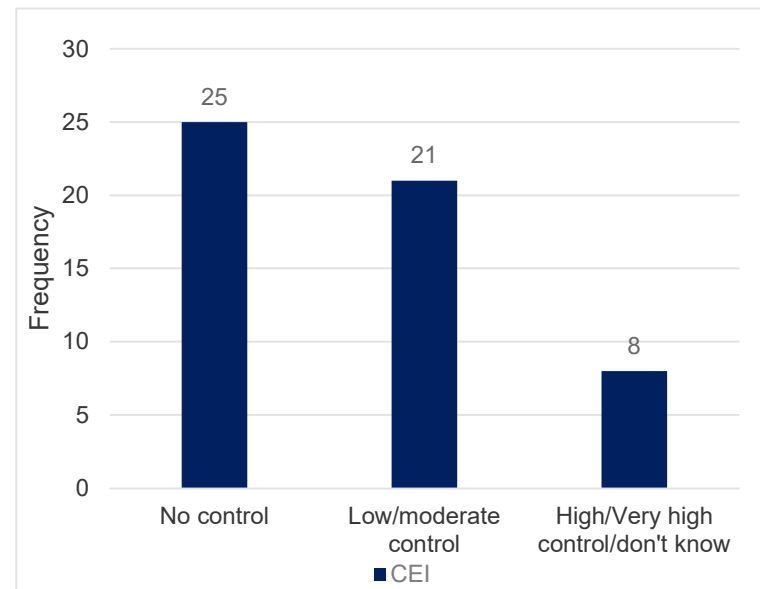
Perceived knowledge & control, CEI

Perceived scientific knowledge of the risk of EMF from CEI



Scientific knowledge exist,
maybe not enough ?

Control over prevention of the potential effects caused by EMF from CEI



Not much control

n= 54

CEI = Collective Electrical Infrastructure

Odds of being an affected farmer (animals):

- **Exposure perception:**

- Exposure perception from CEI:

- Low/Moderate, **OR 15** (1.78, 126.21)
 - High/Very high, **OR 21** (2.58, 170.68)

Reference: No concerned/Very low/Don't know

- Only 3 affected farmers suspecting exposure from a power line **geolocated** an exposure point **within a 150 m** buffer zone from a power line.

- **Risk perception:**

- Risk perception score : **OR 2.25** (1.17, 4.30)

Score from 0 to 8, with a higher score representing a higher risk perception

OR: Odds Ratio, CEI : Collective Electrical Infrastructure

Take-aways

➤ Some farmers reported being affected by infrastructure emitting EMF

➤ Key insights gained :

- More issues were reported in **livestock**
- **Power lines** and **GSM antennas** were the most frequently cited infrastructures (= collective infrastructure)
- **Death/mortality** and **behavioural disorders** were the most commonly reported problems

➤ Limits:

- Sample is not representative to the Belgian farming community (selection bias)
- The focus here is on the results related to the collective electrical infrastructure, the telecommunications data is not included.



Case study with volunteer affected farmers

Also in other countries

- French Government report (2023) → [Characterisation of the impact on livestock farming of telephone masts, electrical installations and wind turbines](#),
 - ‘The figures from this survey show that a **non-marginal number of farms** located near the facilities under study are **affected** by unexplained disturbances. However, it is **not possible to identify the cause** of these disturbances.’
 - ‘However, it has to be said that, even if the data cannot be used on their own to **characterise this impact** in detail, they undeniably shed light that was lacking for further research in this field.’

Any questions?

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Slide 21

EDC2

Because of the short time available, all questions will be at the end of the seminar in a panel session.

Eva De Clercq, 10/11/2025