

Challenges related to the introduction of the EU Green Deal in Poland

Adam Cieslak, Pola Sidoruk, Bogumiła Nowak, M. Szumacher-Strabel

*Poznan University of Life Sciences, Department of Animal Nutrition,
Poland*



The structure of agriculture in Poland

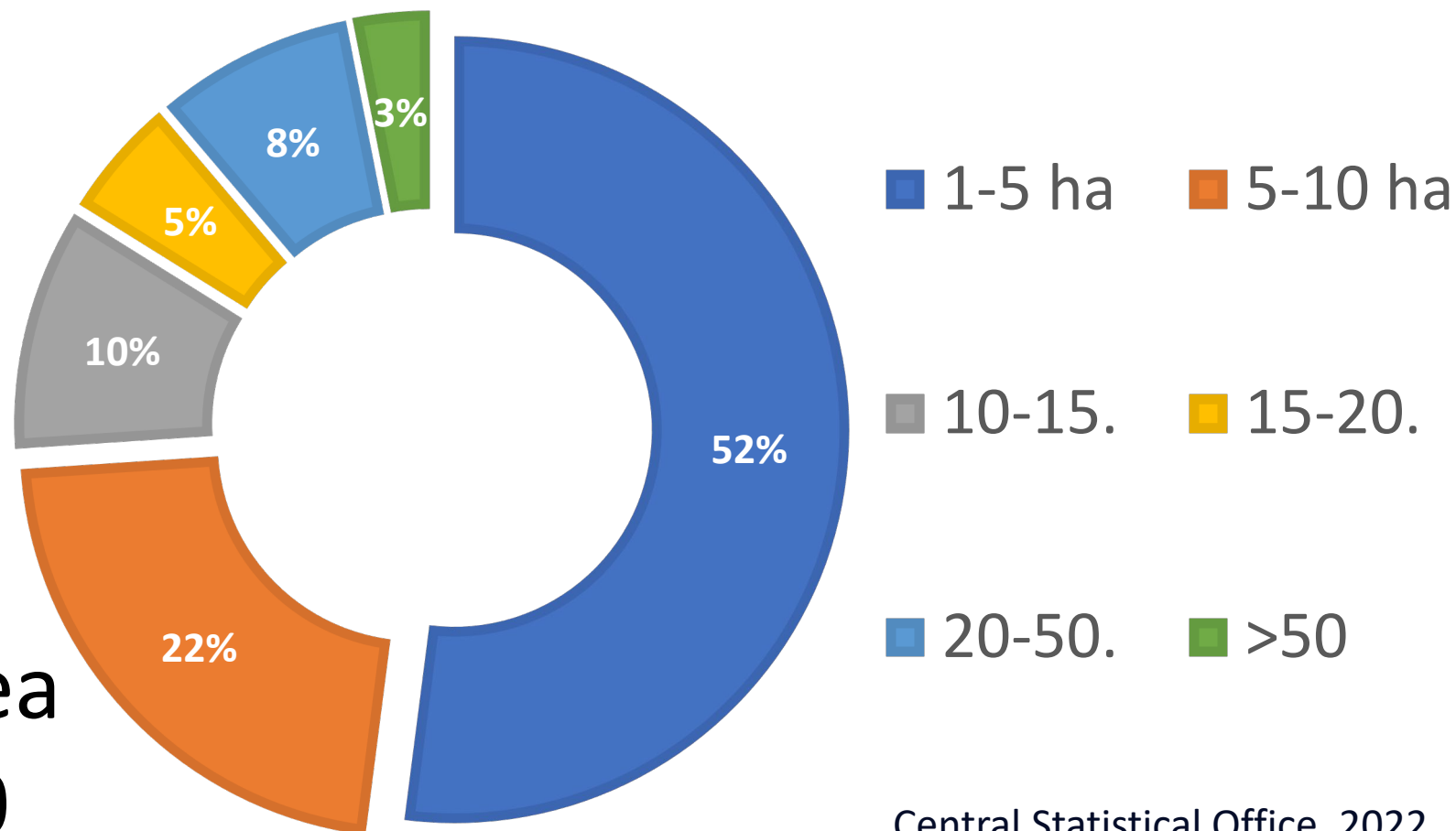
- ca. 1.3 million farms (52%)
- ca. 0.6 million animal farms
- ca. 0.17 million dairy cows farms
- The agriculture in Poland's GDP in 2023 was around 3.3%.
- The food processing sector - Poland's exports reached around 14% (EUR 46.7 billion)

Central Statistical Office, 2022/2024



1 January 2021 - 31 December 2023

Farm area in Poland

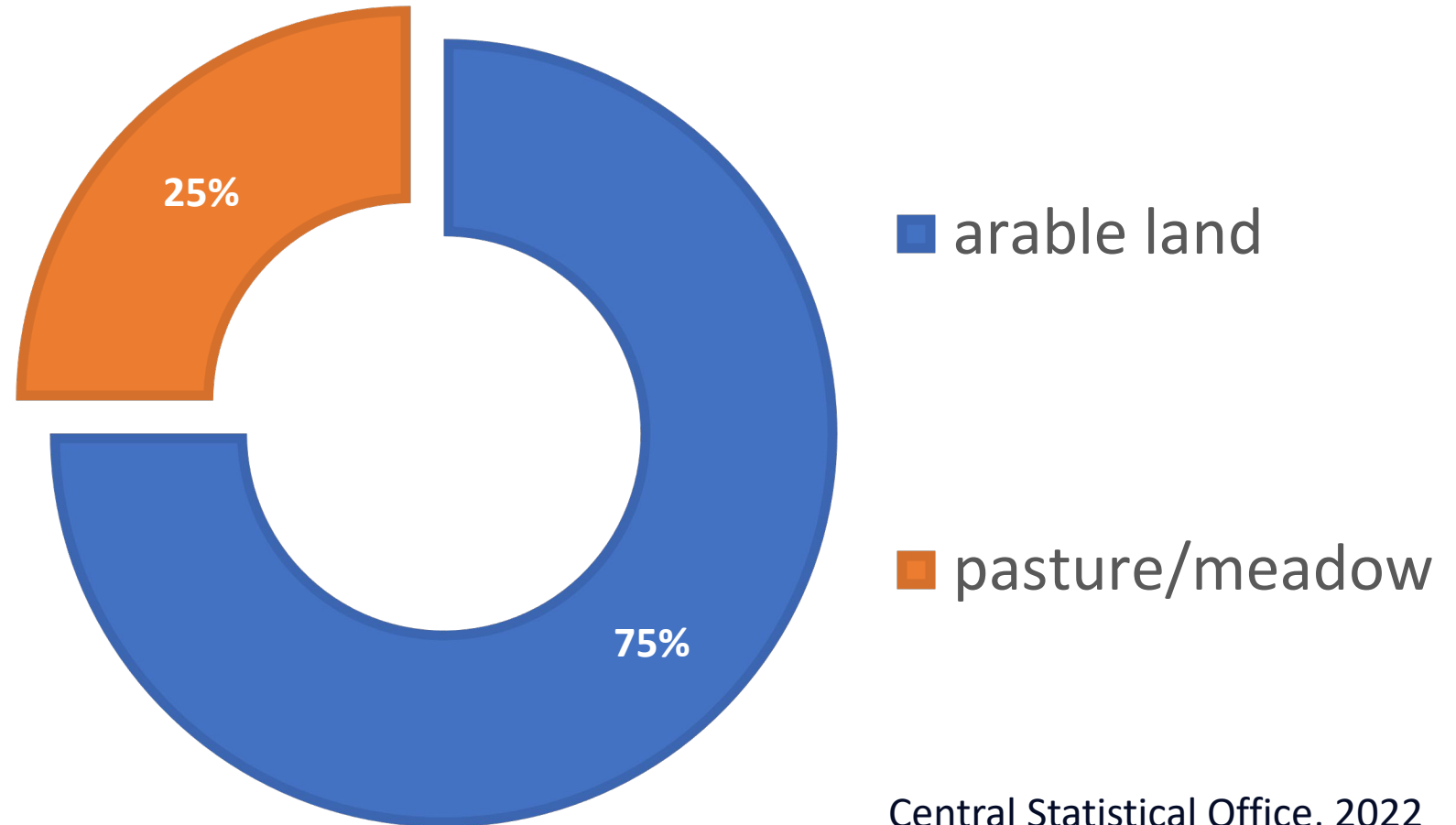


The average farm area was 11.35 ha in 2020



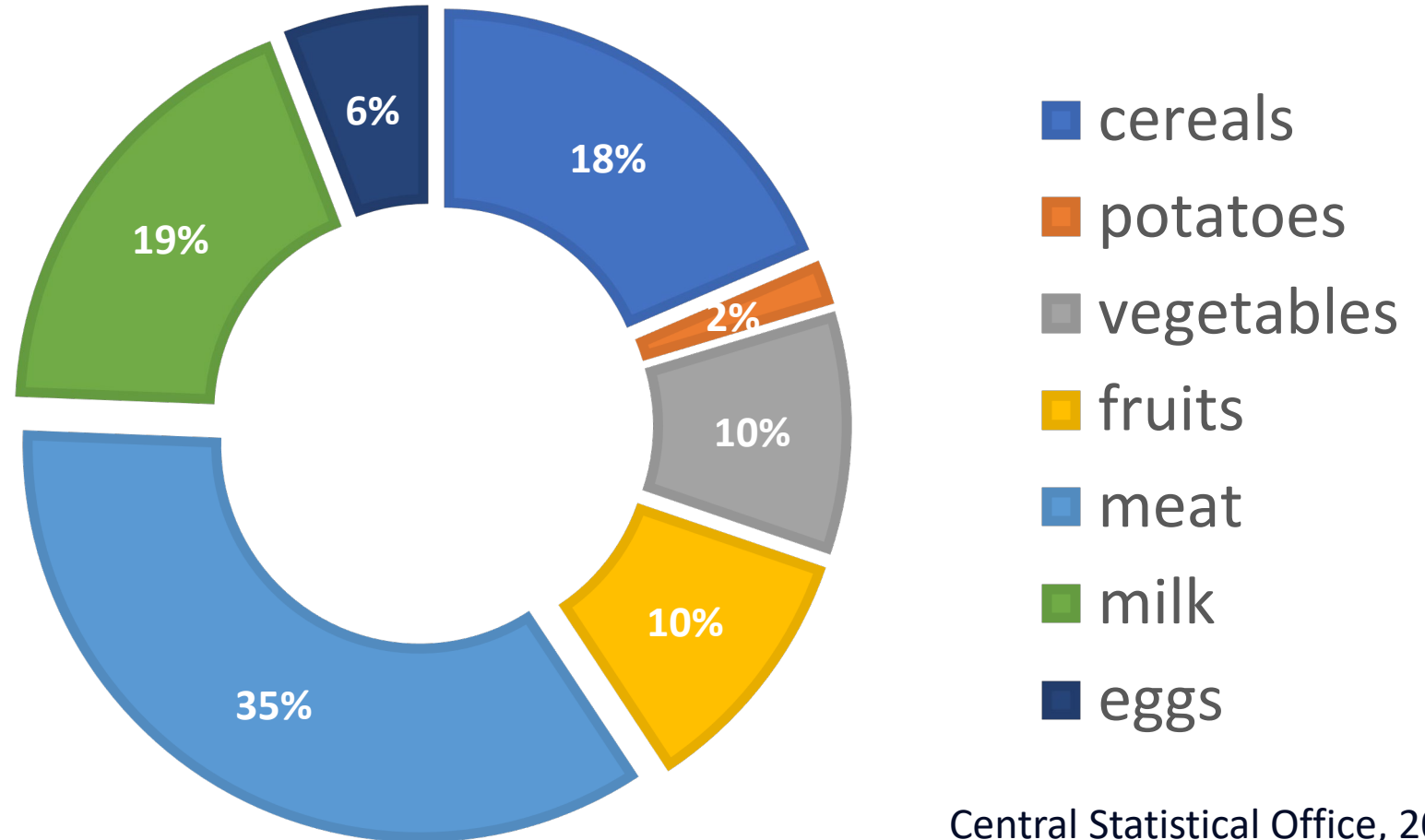
Agriculture land

15 milion ha



Central Statistical Office, 2022

Agricultural production in Poland



Central Statistical Office, 2022

Structure of herds and cows numbers in Poland

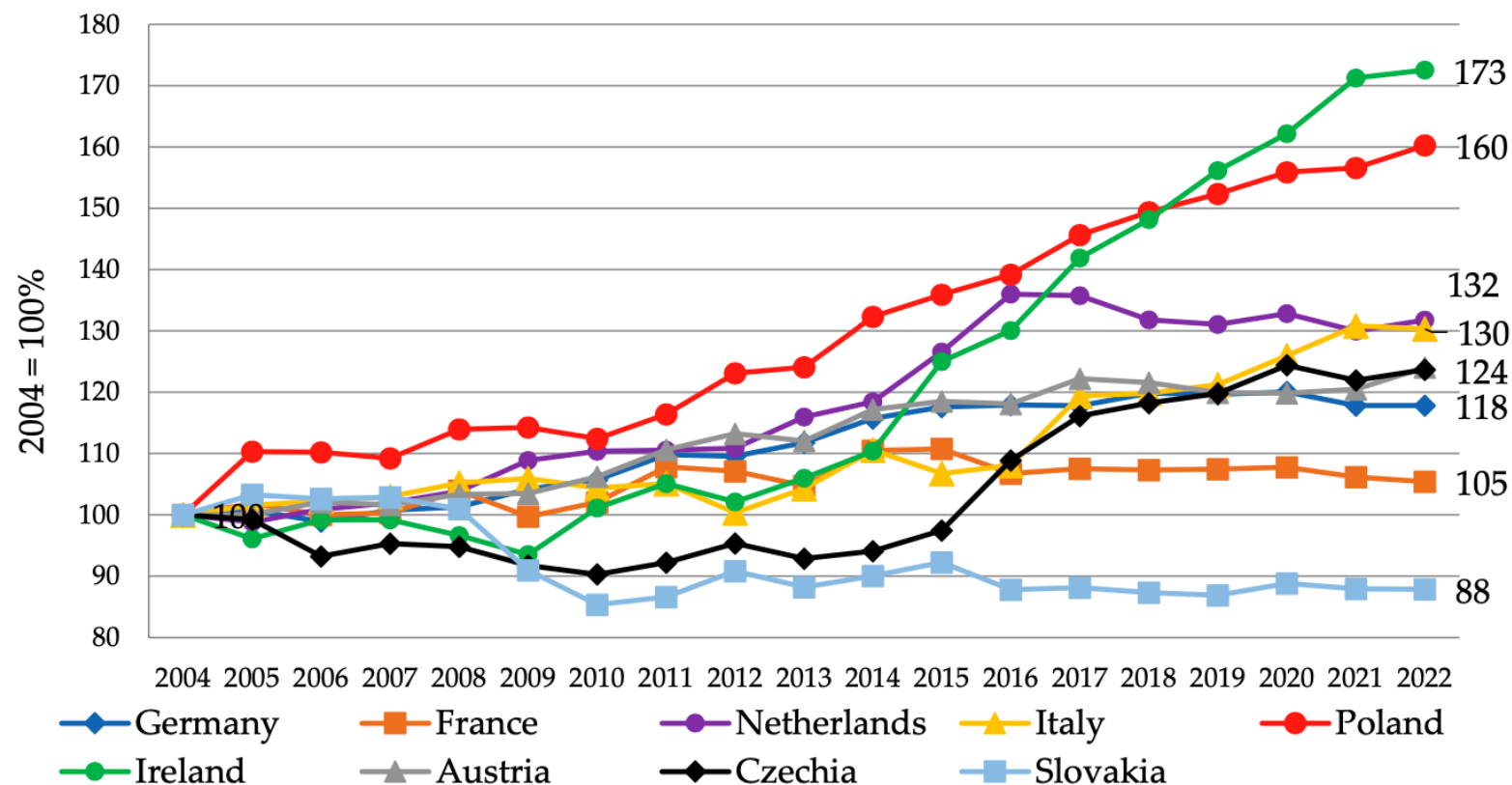
ca. 170 000 herds / 2 203 000 dairy cows

Dairy cows	Herds	Cows
• < 10	64.1%	16.3%
• 10 - 19	18.0%	22.3%
• 20 - 49	15.1%	38.3%
• 50 – 500	2.8%	23.1%

Central Statistical Office, 2022



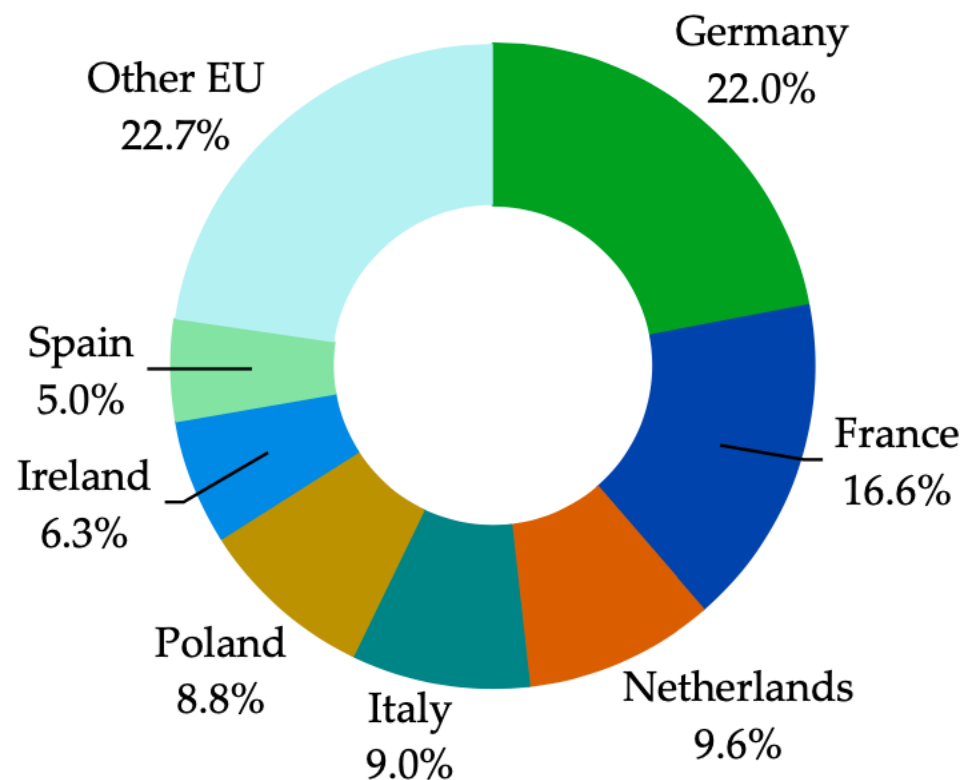
The dynamics of cow milk deliveries to dairies



Zietara et al., 2024



Structure of cows' milk deliveries to dairies in the EU in 2022



Zietara et al., 2024

Diversity of dairy farms in Poland



1 January 2021 - 31 December 2023

Current trends

- change in the structure of dairy farms: closing of small dairy farms - no successors
- farm robotization (milk production)
- investing in renewable energy sources - increasing electricity prices
- introduction of new EU regulations



Surveys - characteristics of farms (52)

	MEAN	SD	<min.; max.>
Size (ha)	188	369	<5; 2000>
Arable farming (ha)	150	302	<4; 1500>
Grassland (ha)	40	64	<0; 350>
Permanent grassland (ha)	9	34	<0; 150>
Herd size	173	386	<20; 2500>
Dairy cows	95	167	<8; 1000>



**Sustainable farming
practices can create
business opportunities**

**Climate change impacts are
already noticeable**

Legend:

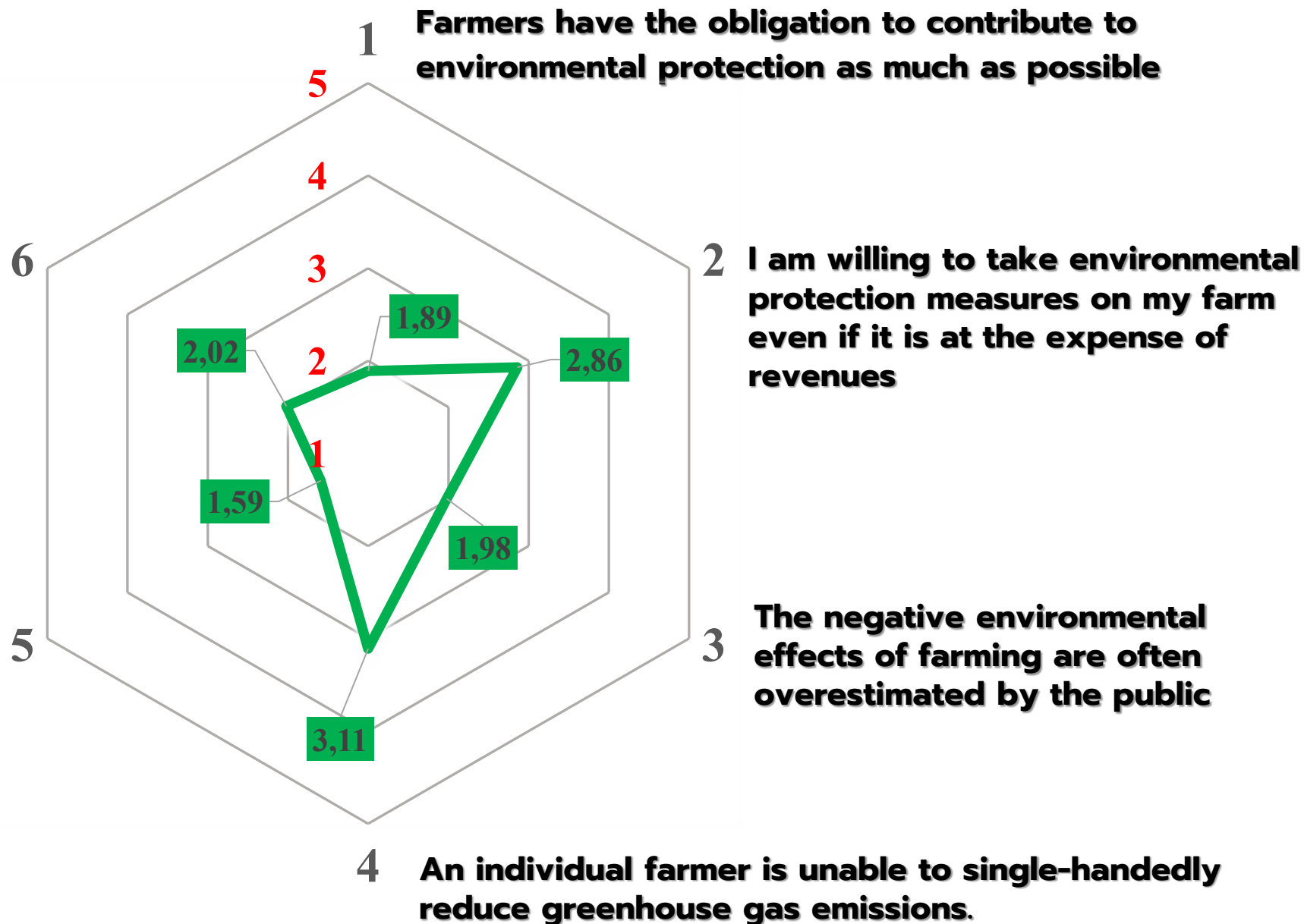
1 – Strongly agree

2 – Agree

3 – Unsure

4 – Disagree

5 – Strongly disagree

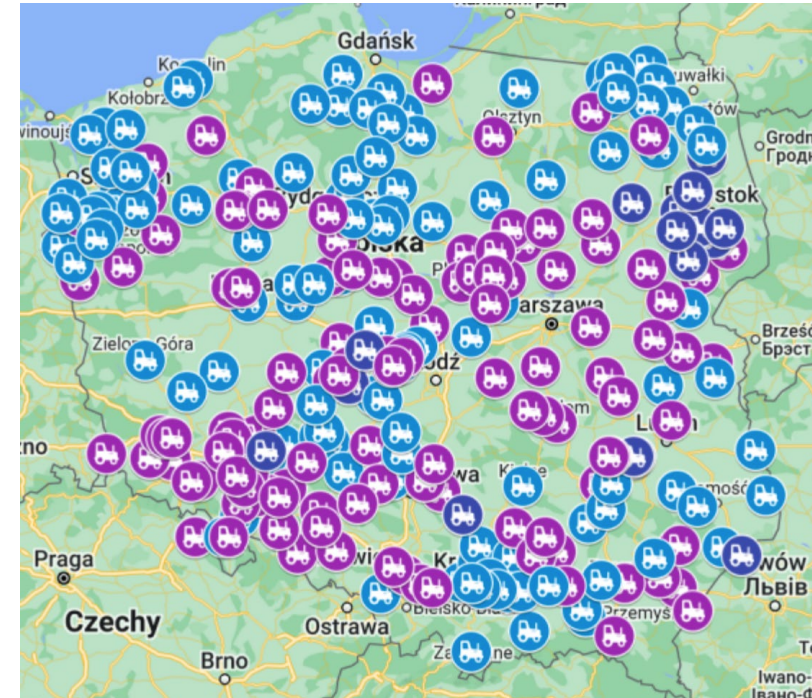


Surveys - conclusions (2022)

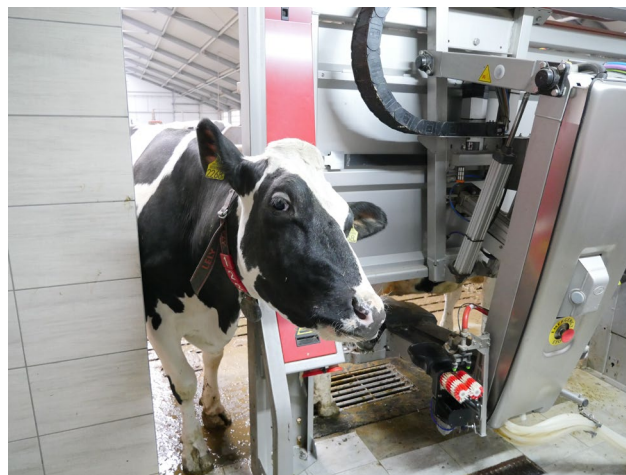
1. A higher level of awareness characterises Polish farmers regarding GHG and ammonia emissions than we assumed.
2. Farmers are unable to use this knowledge to counteract the negative effects of agricultural production on the environment.
3. Implementation of new climate protection and biodiversity strategies is easier on larger farms.
4. Better implementing the current farmer's knowledge requires financial support and educational programs.

Present challenges

- The largest protests in current years;
- The impetus was to import grains from Ukraine (lack of quality control);
- Setting arable land aside and improving animal welfare - the most doubts - increase in production costs;
- The question being raised is whether European society can afford the Green Deal;
- Emission calculator for dairy farms - still in development;



Thank you for your attention!



Acknowledgements:

ERA-NETs SusAn, FACCE ERA-GAS & ICT AGRI 2018 Joint Call
National Ministry or Agency

For more information: www.CCCfarming.eu