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# RAR

**Regenerative Agriculture Revolution**





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# Consumers Perspectives on Regenerative Agriculture in CEE



# Purpose of study

Consumers' perceptions,  
opinions and awareness on  
regenerative agriculture in  
selected Central and Eastern  
Europe Countries.





# Methodology

## **Design and Setting:**

Quantitative, cross-sectional survey study

## **Sample:**

Bulgaria (N = 308) and Poland (N = 617)

## **Tool:**

Original questionnaire

## **Data collection:**

Primary: CAWI (Computer-assisted web interviewing)

Secondary: CAPI (Computer-assisted personal interviewing)

## **Timespan:**

February-March 2023





# Sampling and sample

## Sampling:

- quota sampling,
- variables taken into account in the quota sample: age, gender and place of residence,
- representative sample based on detailed data on the population covering demographic (public statistics),
- exclusion criteria: farmers and agricultural professionals.

## Sample size estimation:

- margin of error:  $\pm 4\%$ ; proportion: 0.5; confidence level: 95%

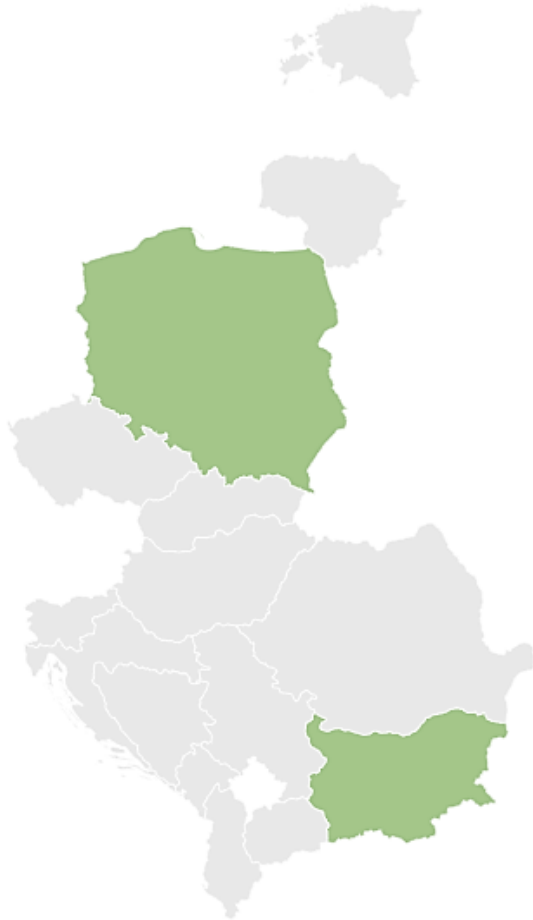
## Contract Research Organization:

- Faculty of Health Sciences  
Medical University of Warsaw
- PR Hub, public relations  
consulting and insight hub





# Participants characteristics



Male

45.2%



Female

54.8%



Countryside

41.3%



Town/City

58.7%



Level of education

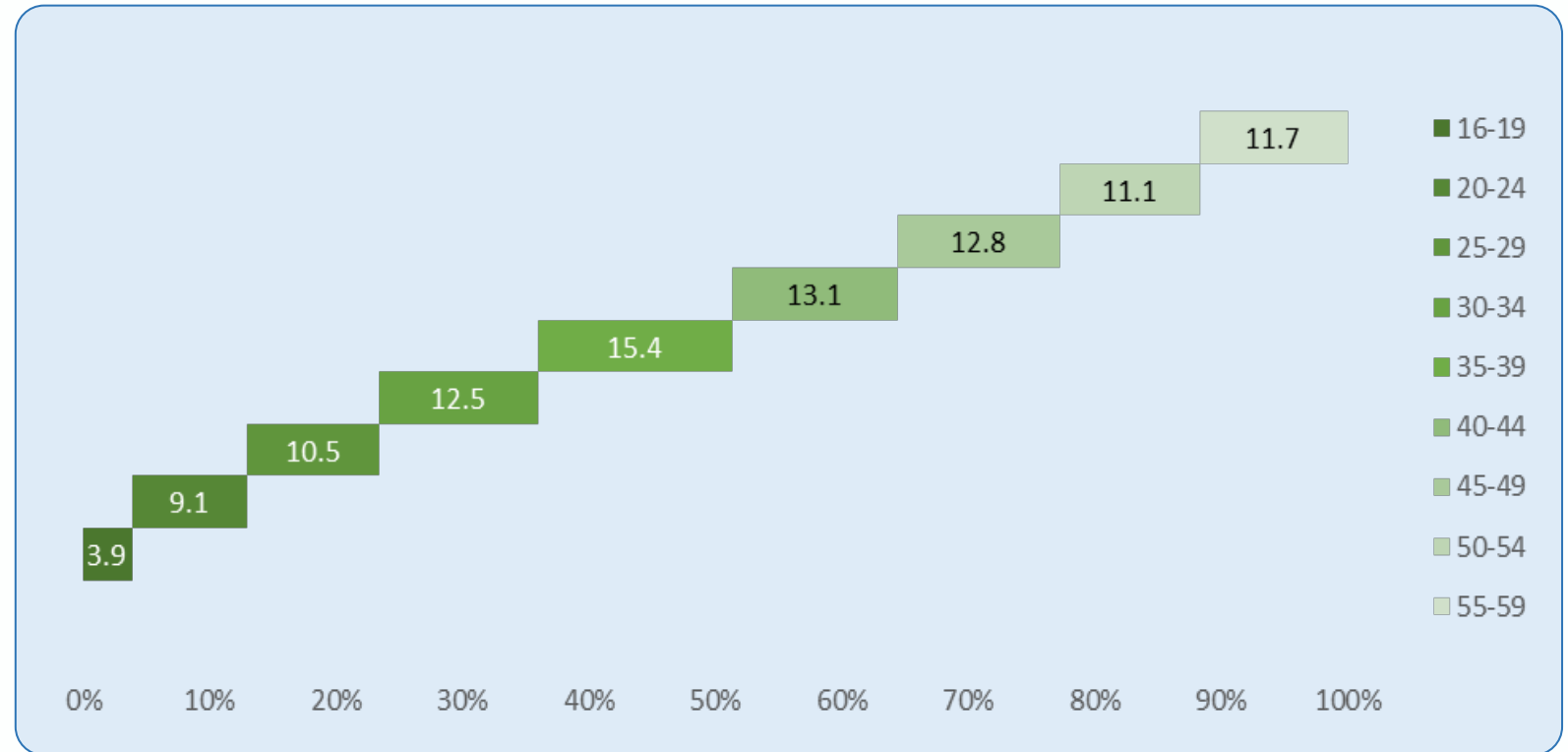
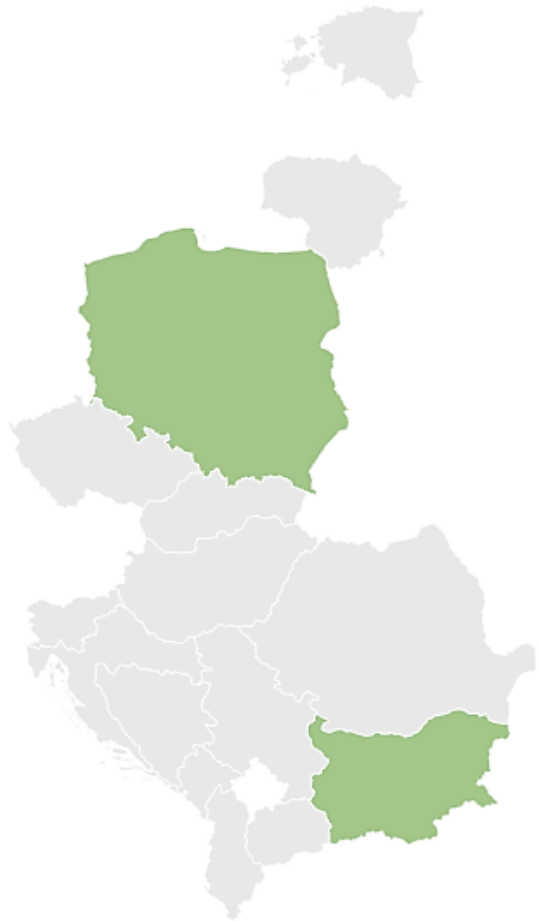
9.1% | 11.5% | 25.8% | 53.6%



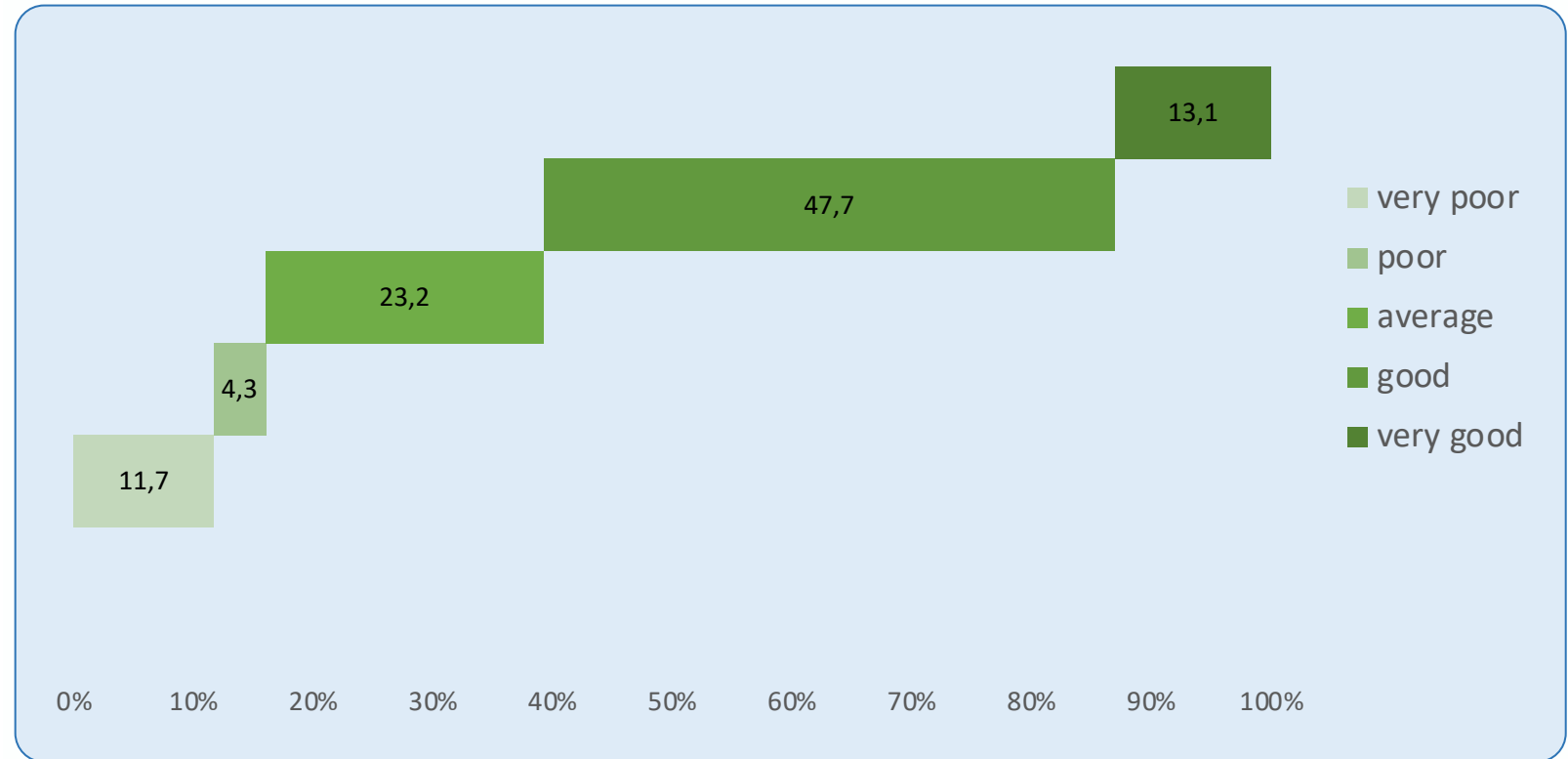
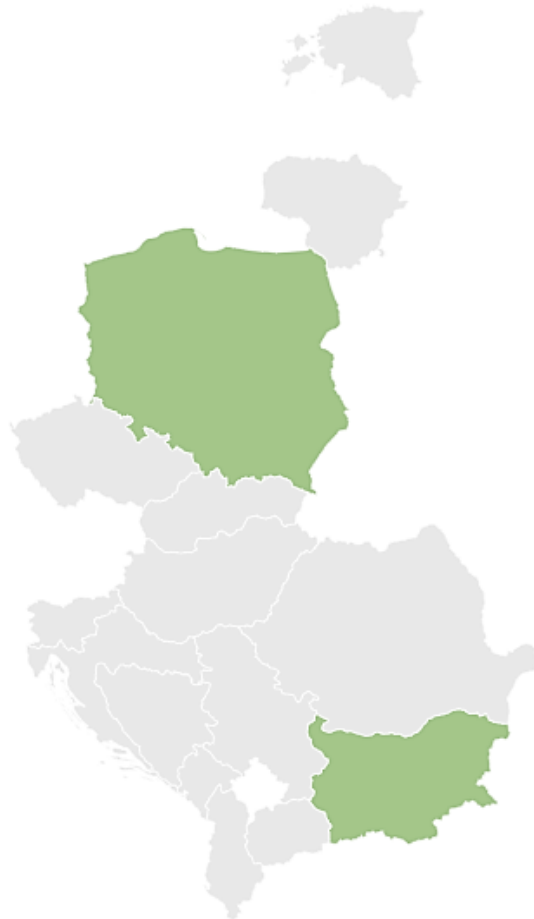
Mean age  $\pm$  SD (range)

40.3  $\pm$  12.75 yr. (16-59)

# Participants characteristics (age range)



# Participants characteristics (economic situation)





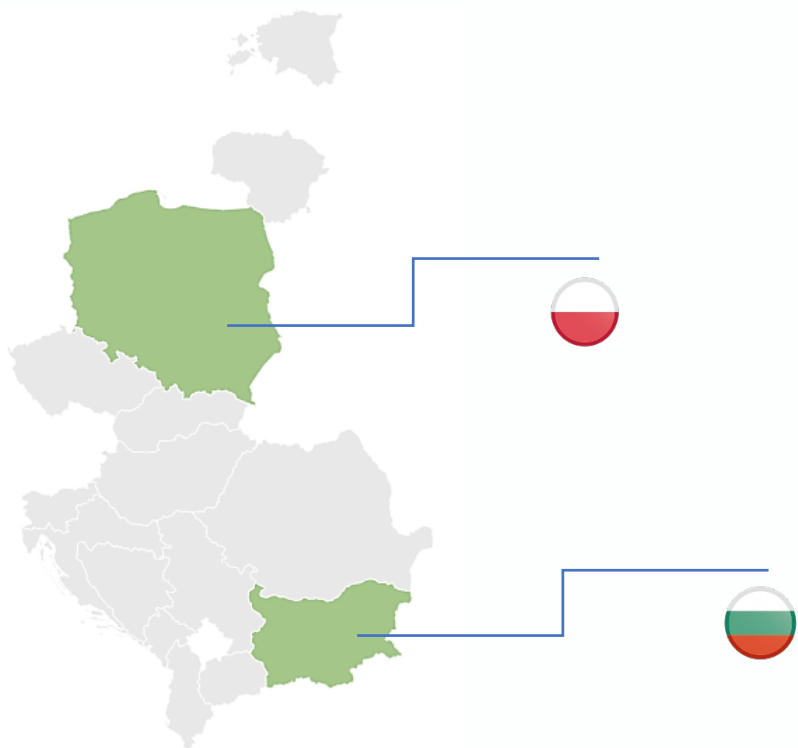
# Questionnaire structure

- I. Familiar with regenerative agriculture.
- II. Activities/practices associate with regenerative agriculture.
- III. Impact of regenerative agriculture.
- IV. Opinion on regenerative agriculture and regenerative food production.
- V. Willingness to buy regenerative food.





# Overall results





# Part I

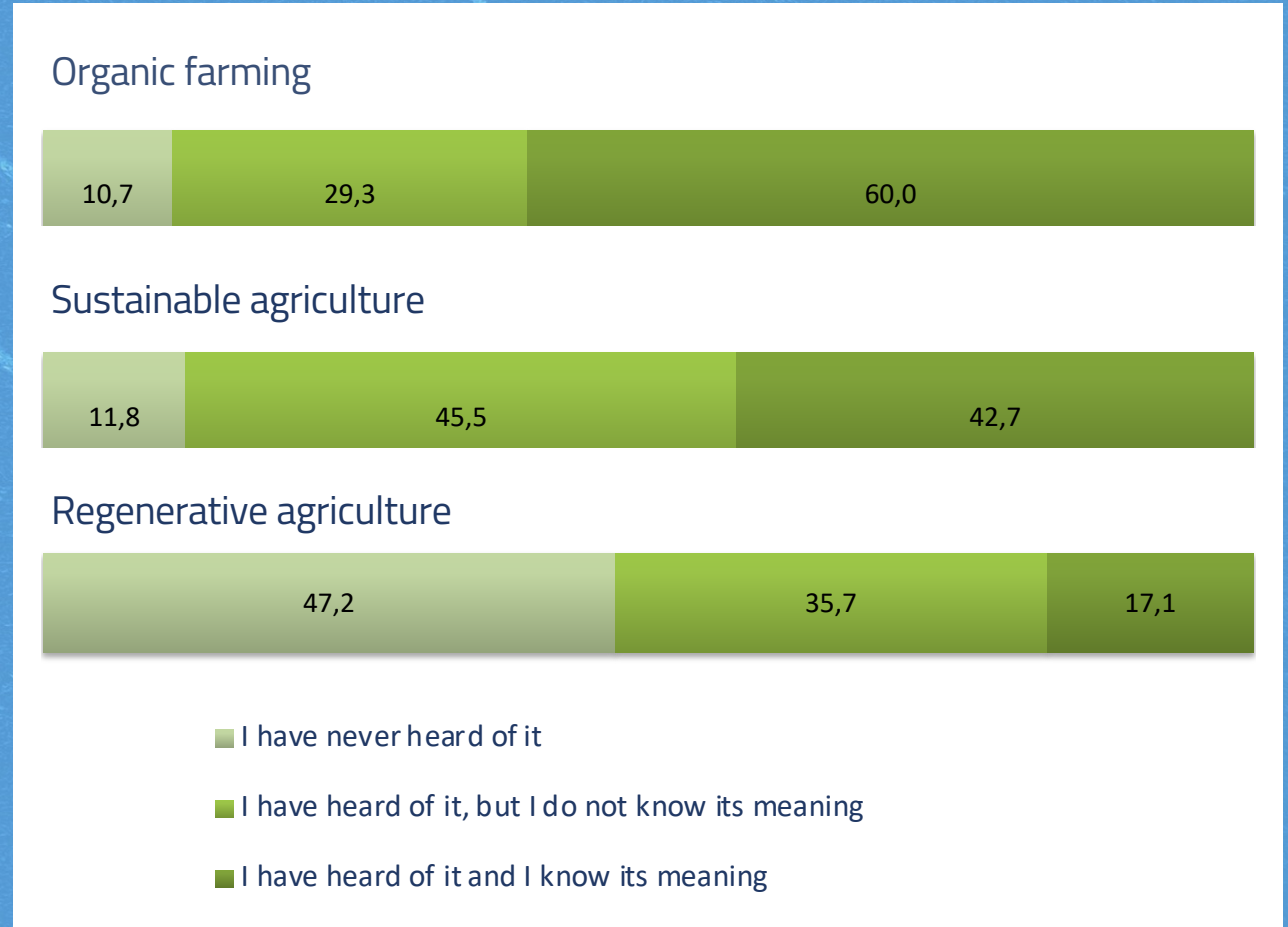
Familiar with regenerative  
agriculture





# Agricultural and farming terms

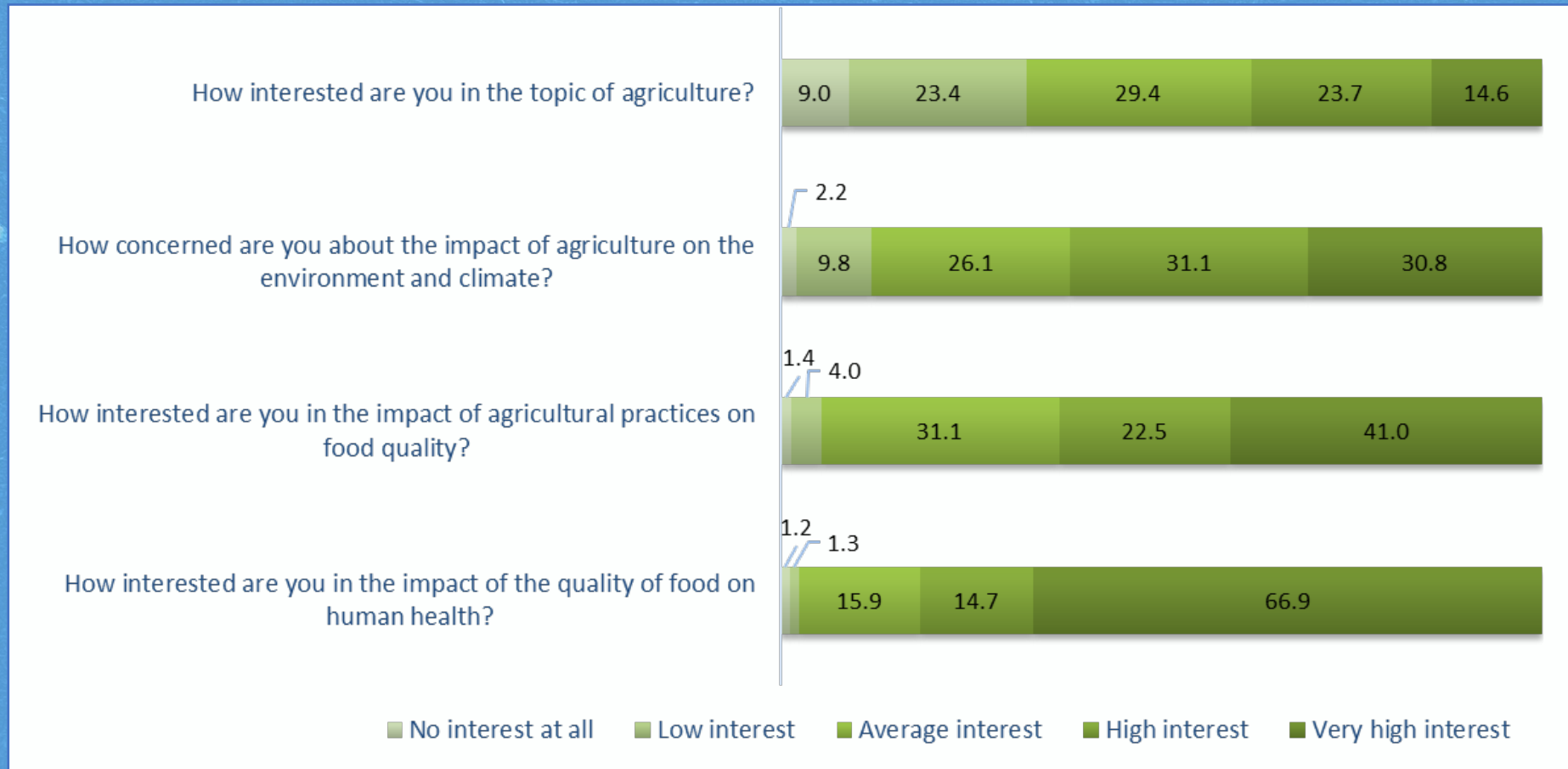
Most respondents know the meaning of the term "Organic farming" (60.0%). Slightly less familiar with the term "Sustainable agriculture" (42.7%). However, the fewest respondents know the term "Regenerative agriculture" (only 17.1%).





# The interest in the topics of agriculture/food/health

The respondents are most interested in the impact of food quality on health (66.9%). There is less interest in the impact of agricultural practices on food quality (41.0%).





# Part II

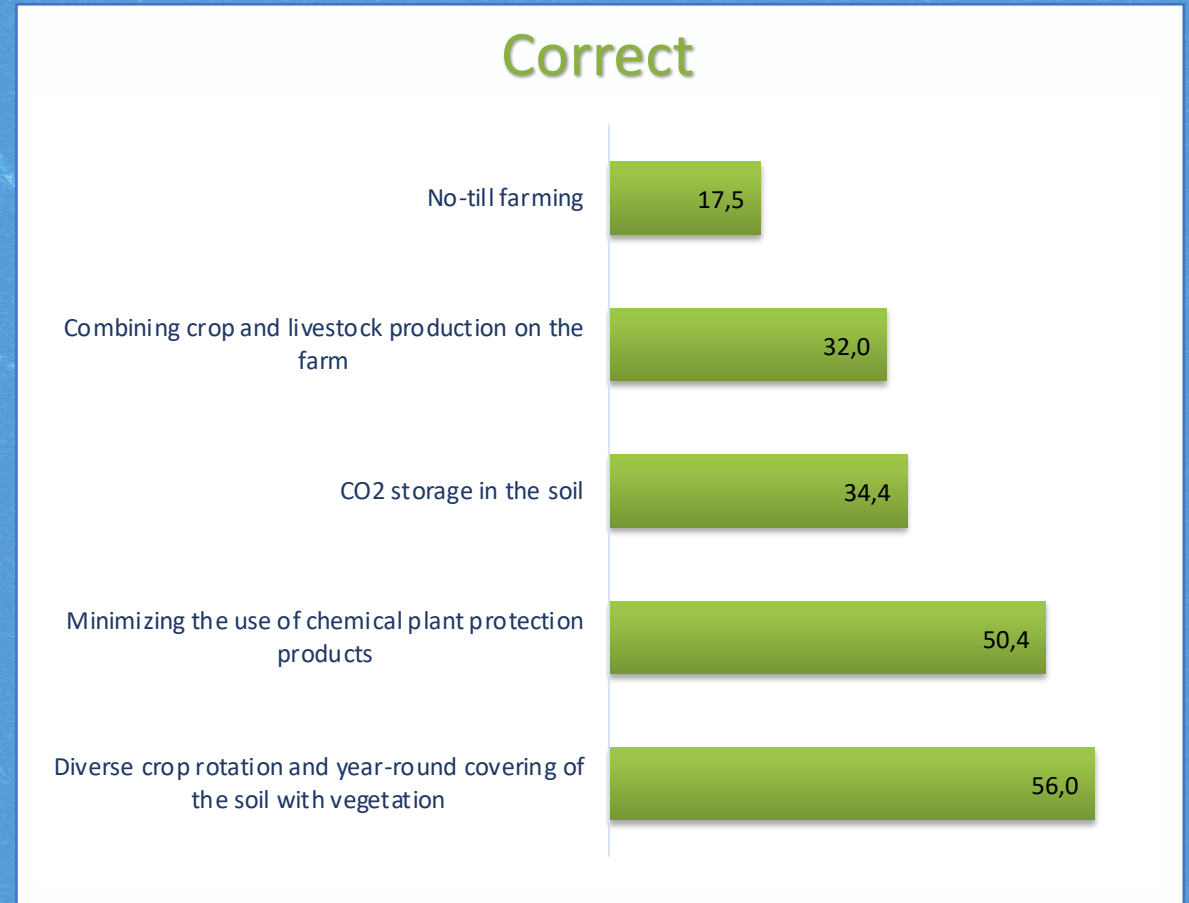
Activities/practices  
associate with regenerative  
agriculture





# Practices/activities related to regenerative agriculture

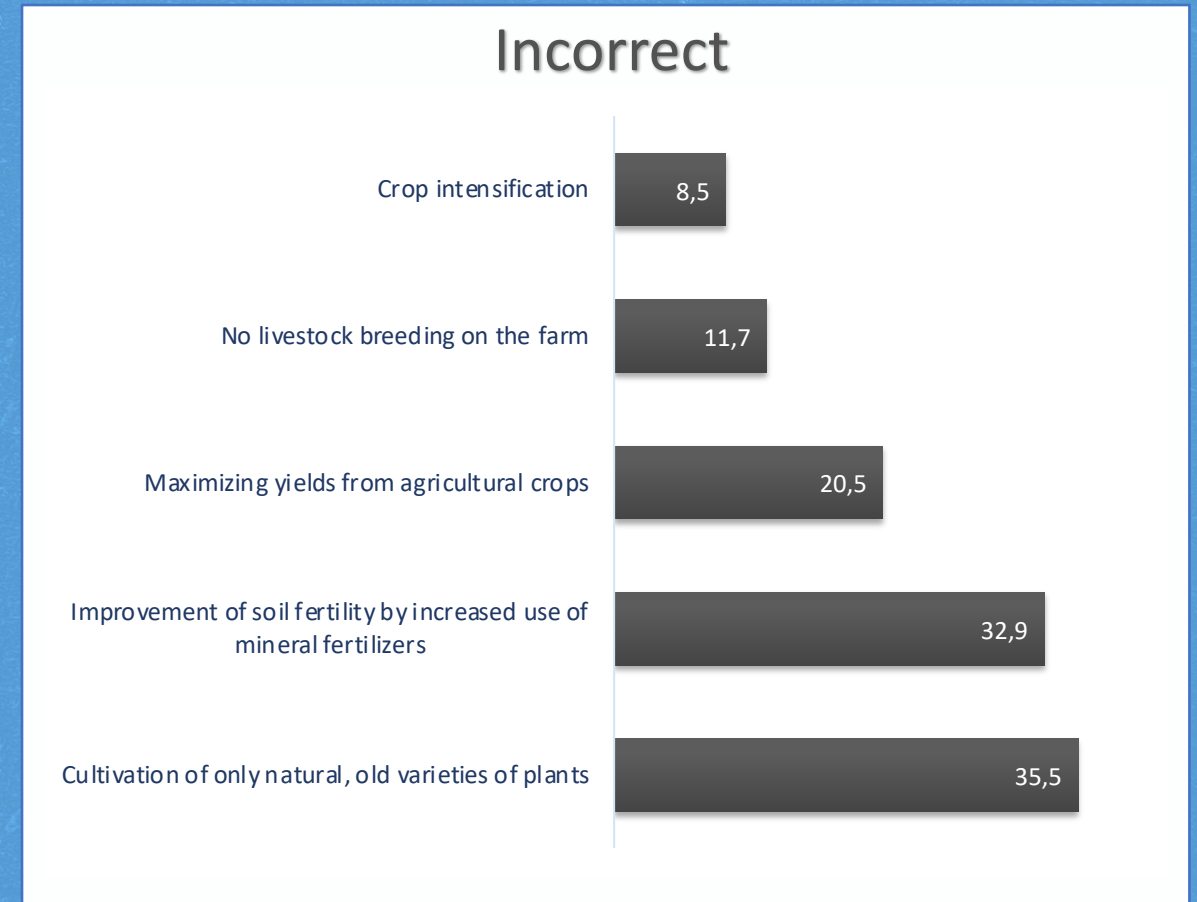
According to the respondents, the term "Regenerative agriculture" is mainly associated with "diverse crop rotation and year-round covering of the soil with vegetation" (56.0%) and "minimizing the use of chemical plant protection products" (50.4%).





# Practices/activities related to regenerative agriculture

Respondents incorrectly associate with "Regenerative agriculture" such practices as: "cultivation of only natural, old varieties of plants" (35.5%) and "improvement of soil fertility by increased use of mineral fertilizers" (32.9%). However, the choice of these options was less frequent than those from the list of correct associations.





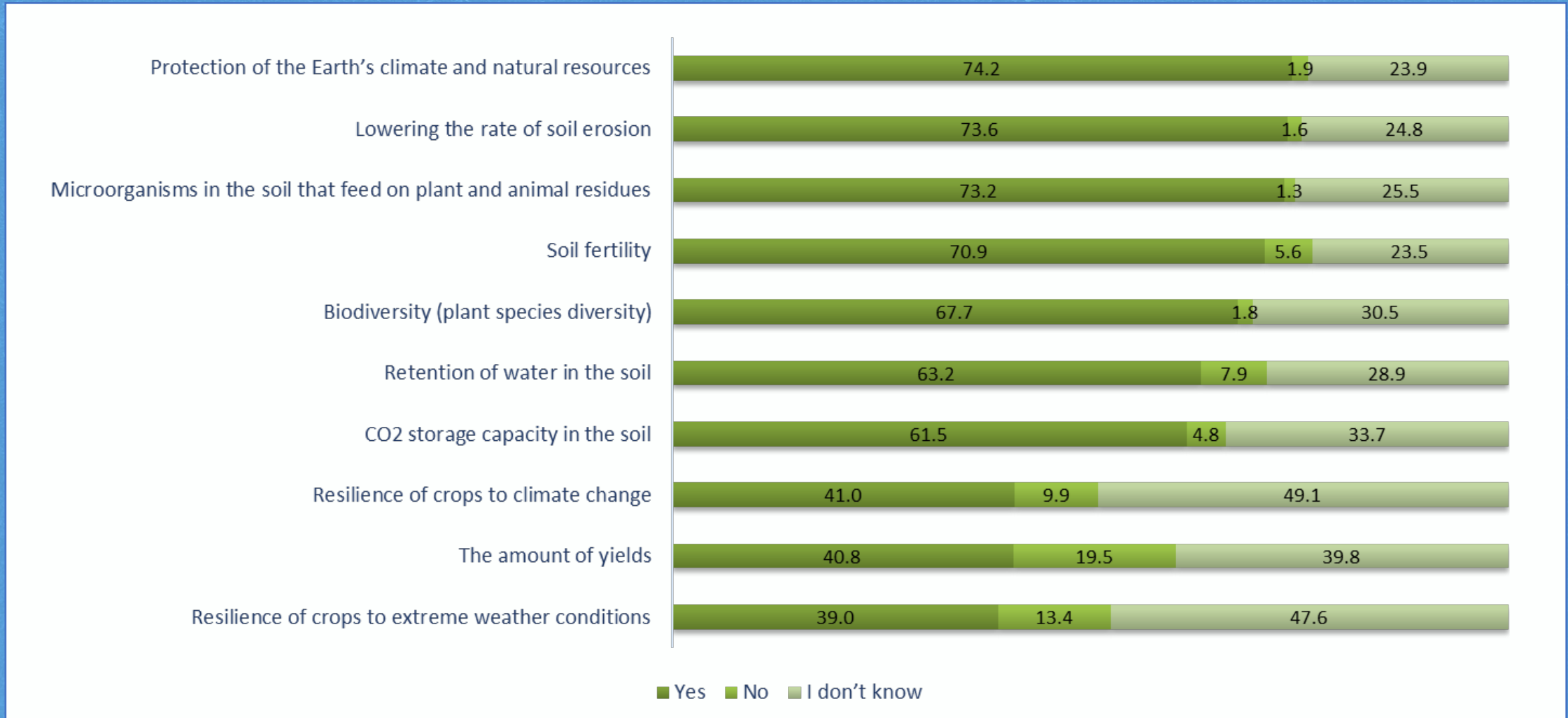
# Part III

Impact of regenerative  
agriculture





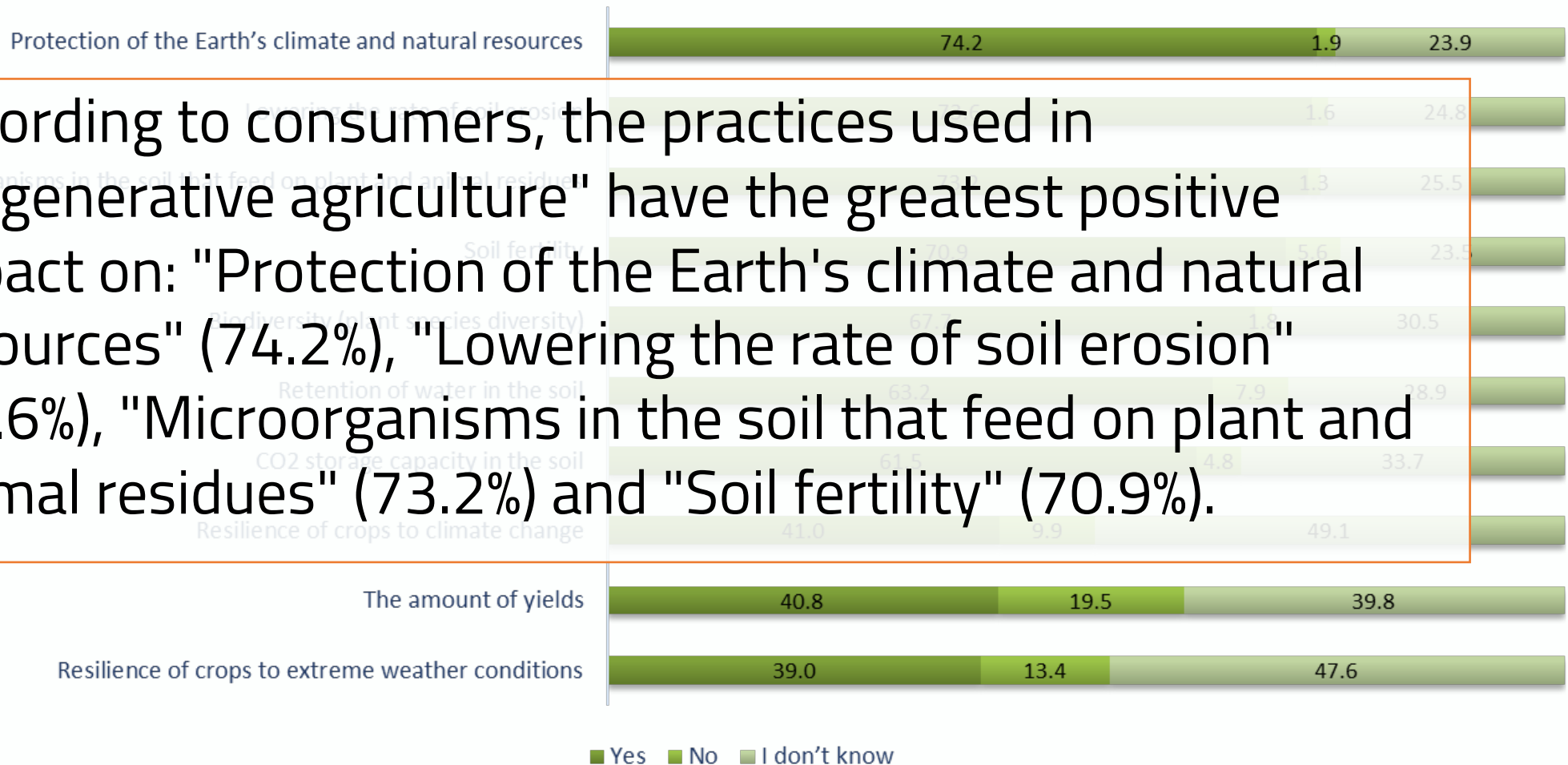
# Impact of regenerative agriculture practices





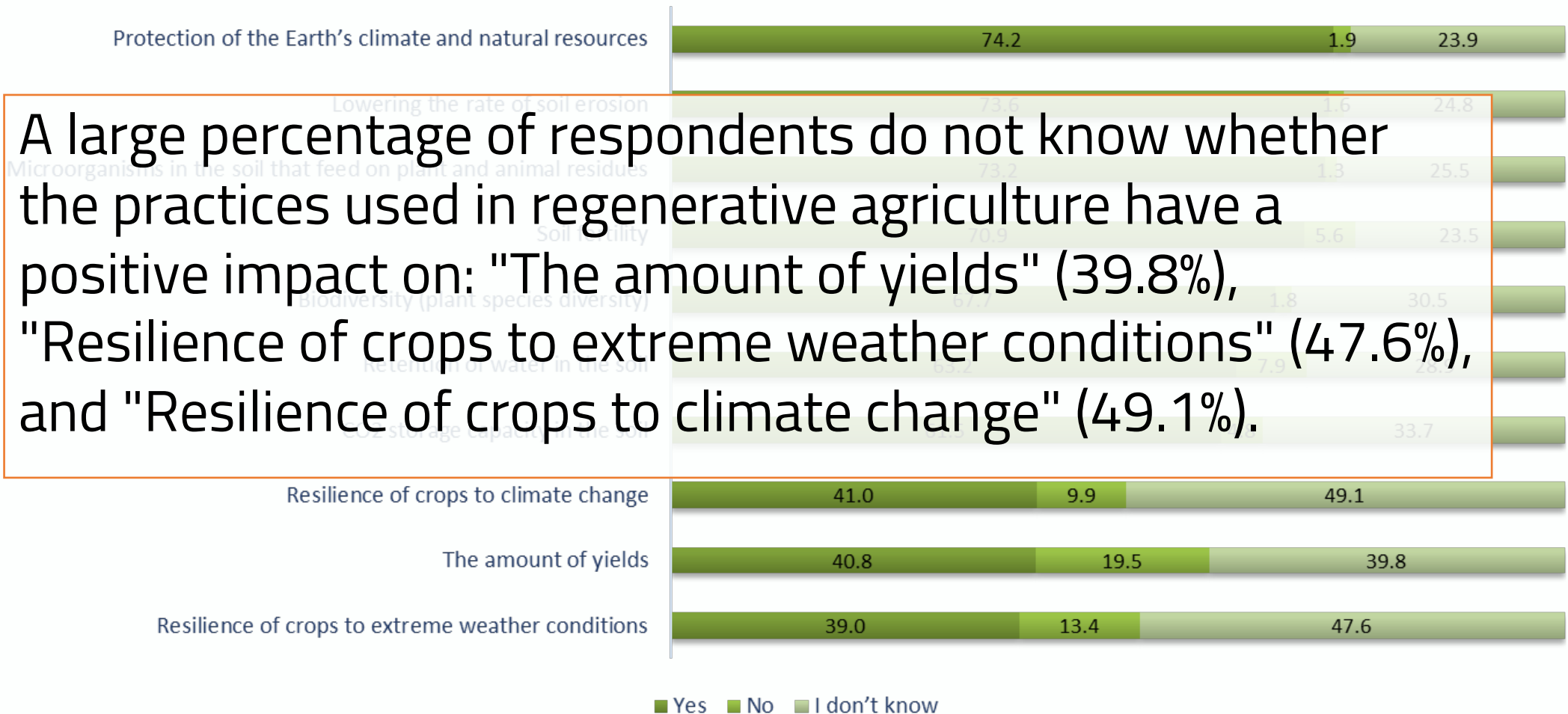
# Impact of regenerative agriculture practices

According to consumers, the practices used in "Regenerative agriculture" have the greatest positive impact on: "Protection of the Earth's climate and natural resources" (74.2%), "Lowering the rate of soil erosion" (73.6%), "Microorganisms in the soil that feed on plant and animal residues" (73.2%) and "Soil fertility" (70.9%).





# Impact of regenerative agriculture practices

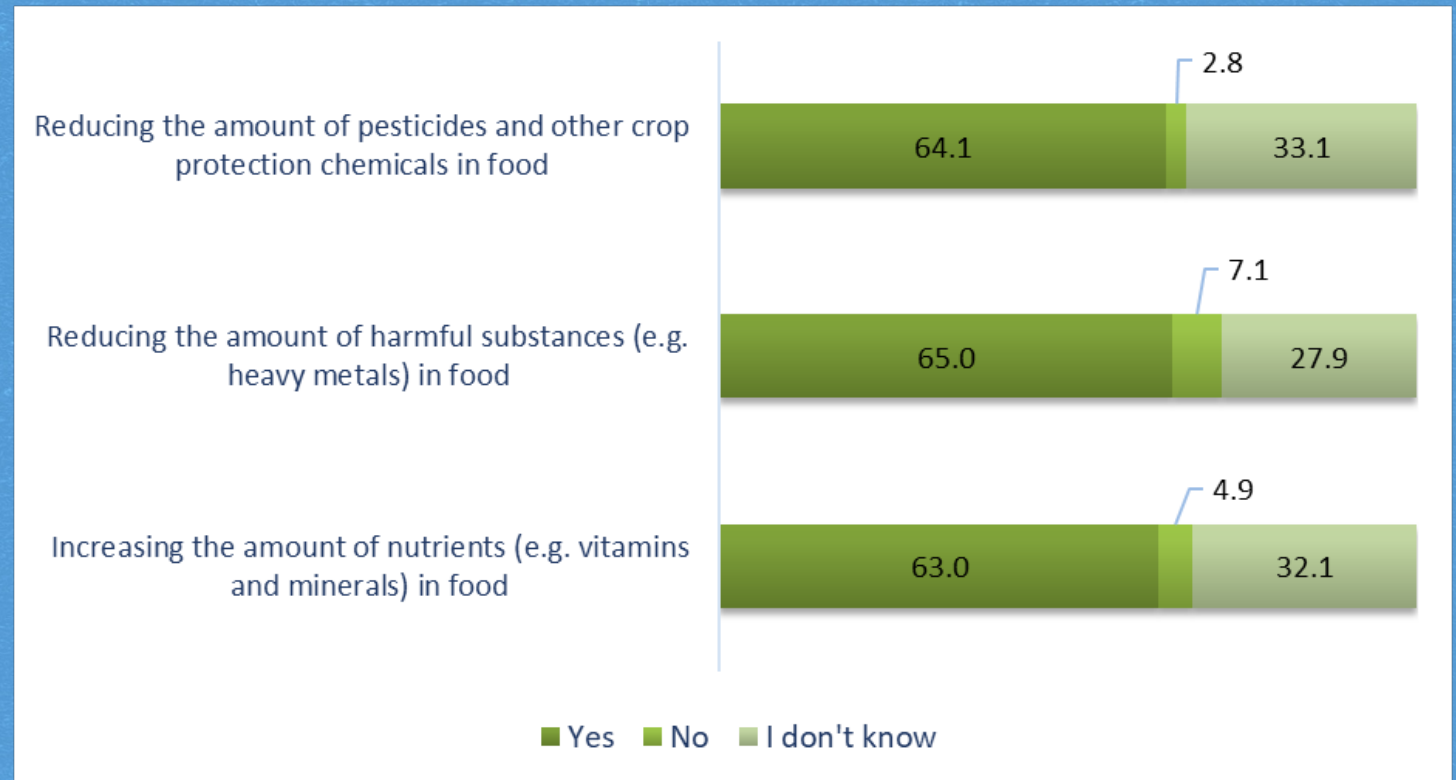


A large percentage of respondents do not know whether the practices used in regenerative agriculture have a positive impact on: "The amount of yields" (39.8%), "Resilience of crops to extreme weather conditions" (47.6%), and "Resilience of crops to climate change" (49.1%).



# Impact of regenerative agriculture practices

The surveyed consumers perceive the positive impact of "Regenerative agriculture" practices on the condition of the soil in a similar percentage (about 63-65%).





# Part IV

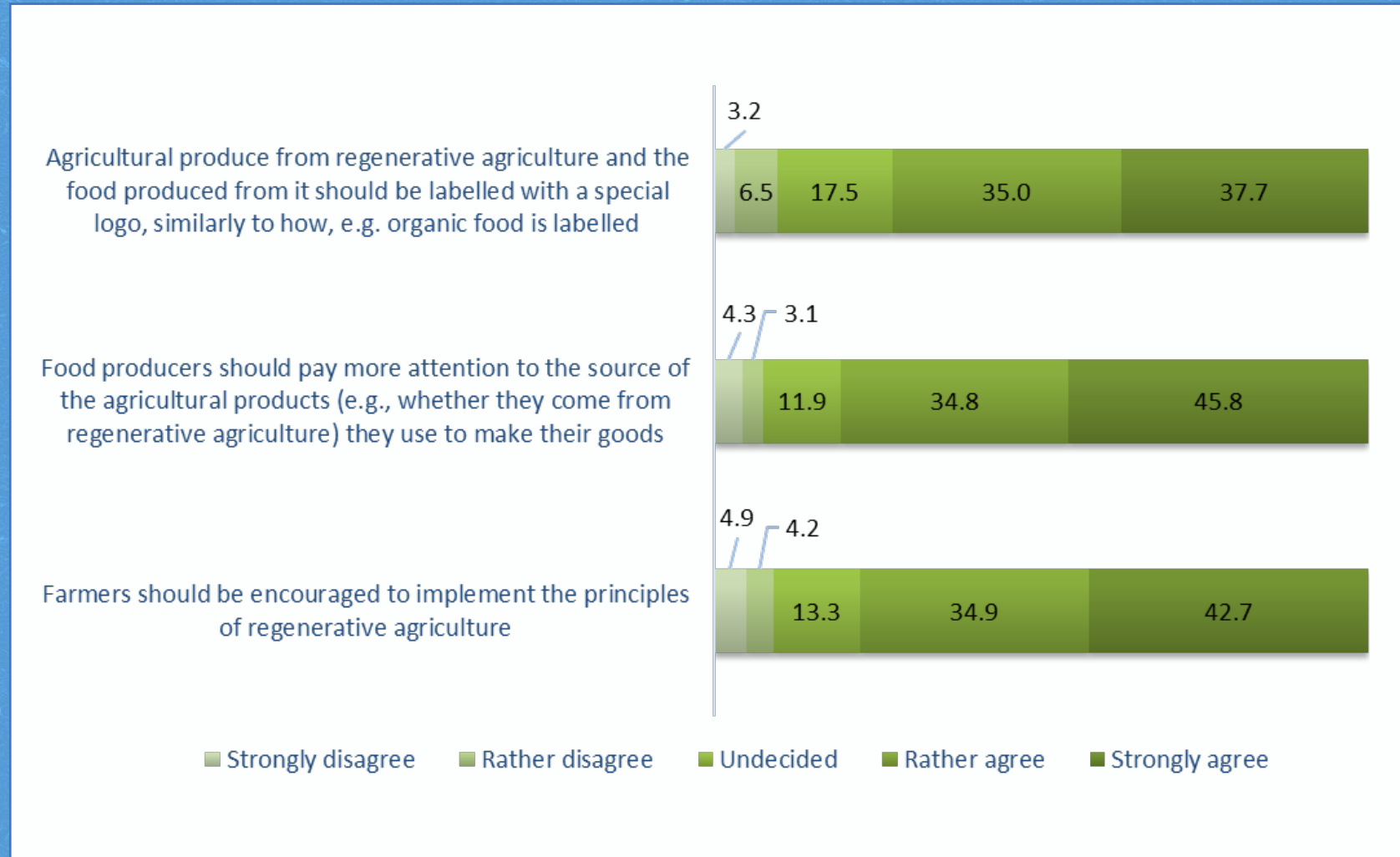
Opinion on regenerative  
agriculture and regenerative  
food production





# Opinion on regenerative agriculture and regenerative food production

Consumers largely agree with the opinion on the promotion of regenerative agriculture and regenerative food, as well as the labeling of these foods with a special logotype.





# Part V

Willingness to buy  
regenerative food





# Willingness to buy regenerative food

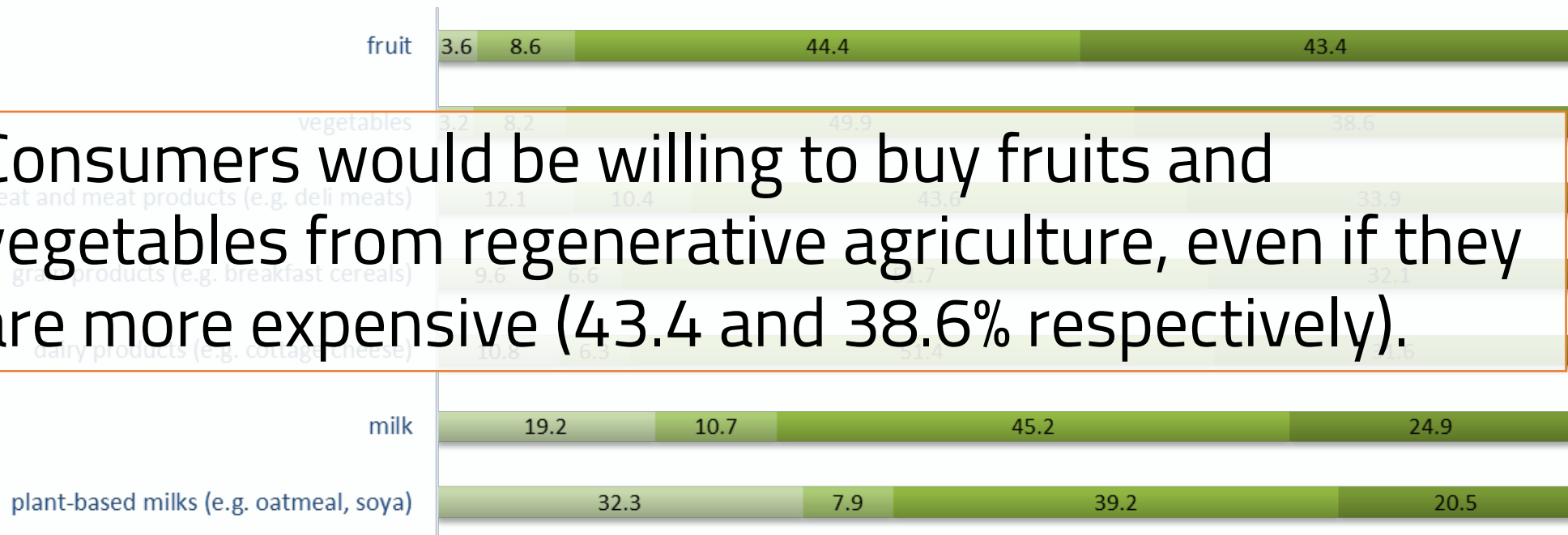


- I do not buy such products
- I will choose a non-regenerative agriculture product
- I will choose a product regenerative agriculture if it costs the same
- I will choose a regenerative agriculture product even if it is more expensive



# Willingness to buy regenerative food

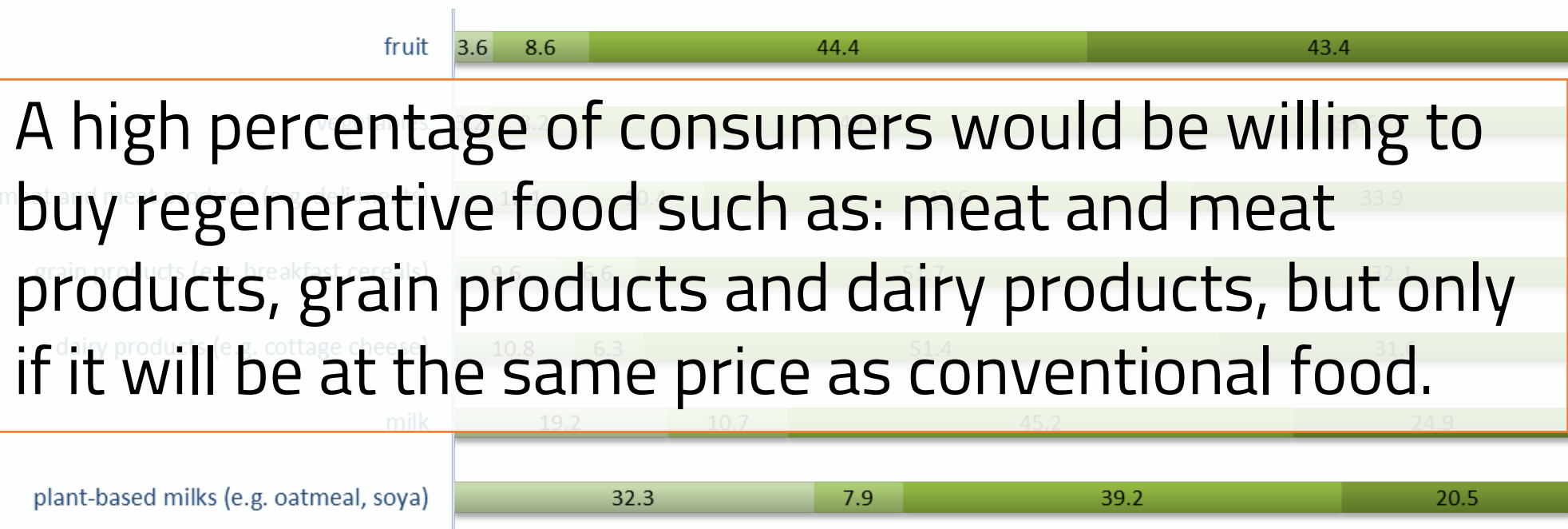
Consumers would be willing to buy fruits and vegetables from regenerative agriculture, even if they are more expensive (43.4 and 38.6% respectively).



- I do not buy such products
- I will choose a non-regenerative agriculture product
- I will choose a product regenerative agriculture if it costs the same
- I will choose a regenerative agriculture product even if it is more expensive



# Willingness to buy regenerative food

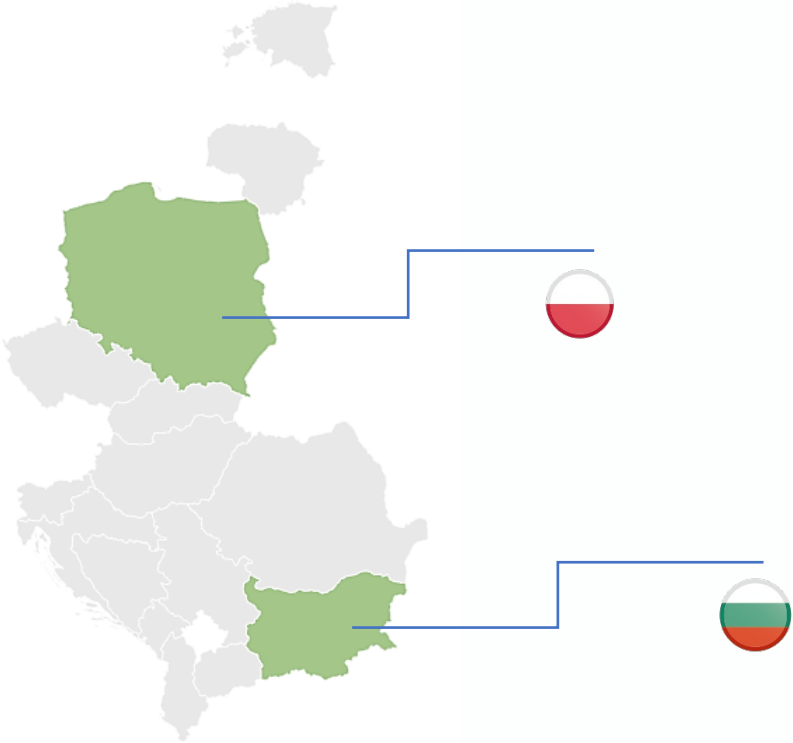


A high percentage of consumers would be willing to buy regenerative food such as: meat and meat products, grain products and dairy products, but only if it will be at the same price as conventional food.

- I do not buy such products
- I will choose a non-regenerative agriculture product
- I will choose a product regenerative agriculture if it costs the same
- I will choose a regenerative agriculture product even if it is more expensive

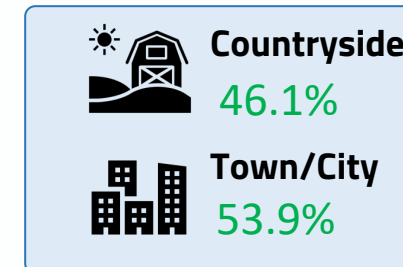
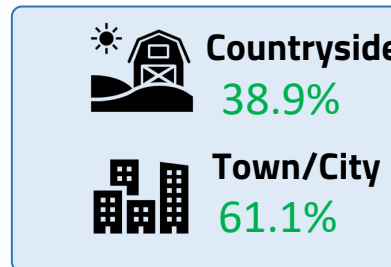
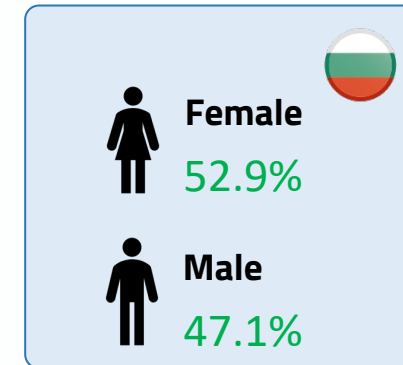
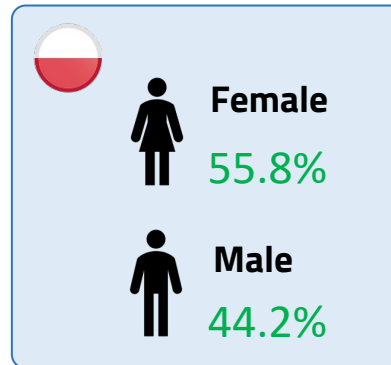
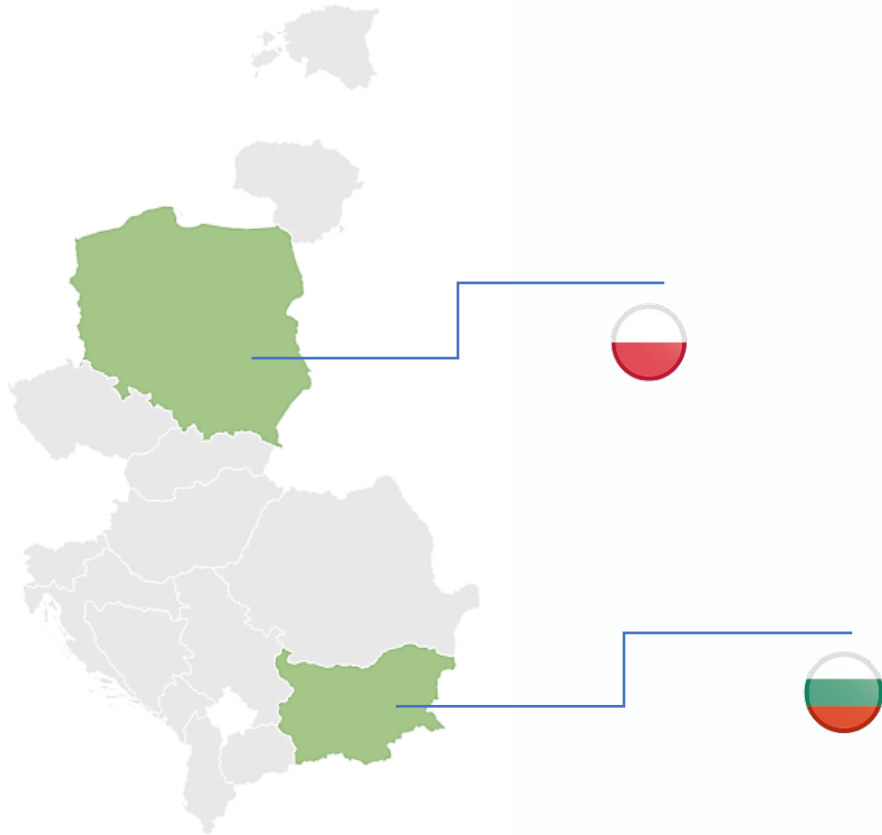


# Comparative results



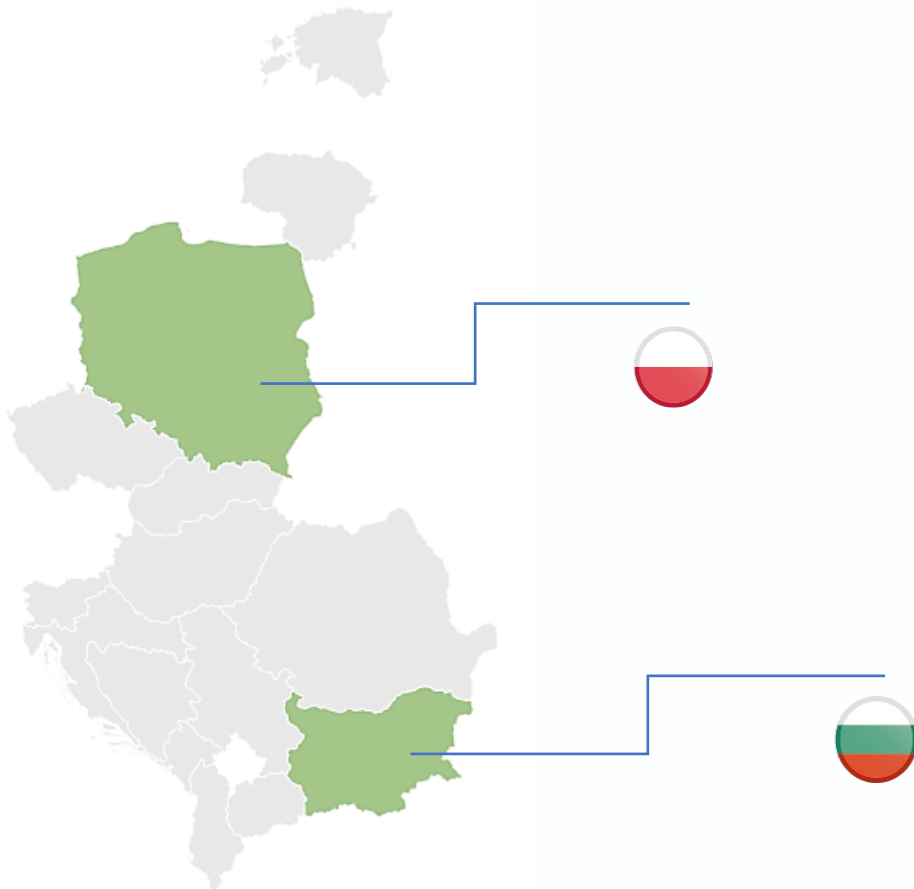


# Participants characteristics





# Participants characteristics



**Mean age  $\pm$  SD (range)**

39.7  $\pm$  12.38 yr. (16-59)



**Level of education**

11.7% | 12.8% | 24.6% | 50.9%



**Mean age  $\pm$  SD (range)**

41.4  $\pm$  13.47 yr. (16-59)

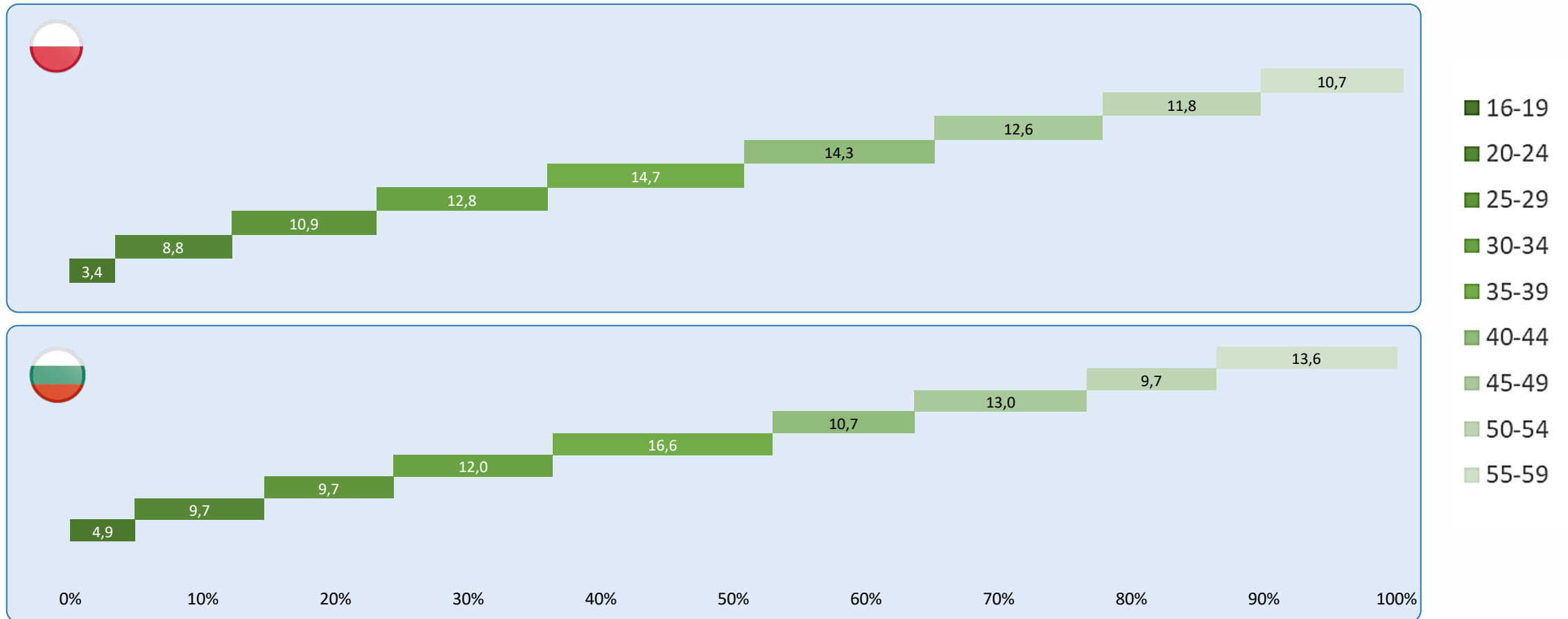


**Level of education**

3.9% | 8.8% | 28.2% | 59.1%

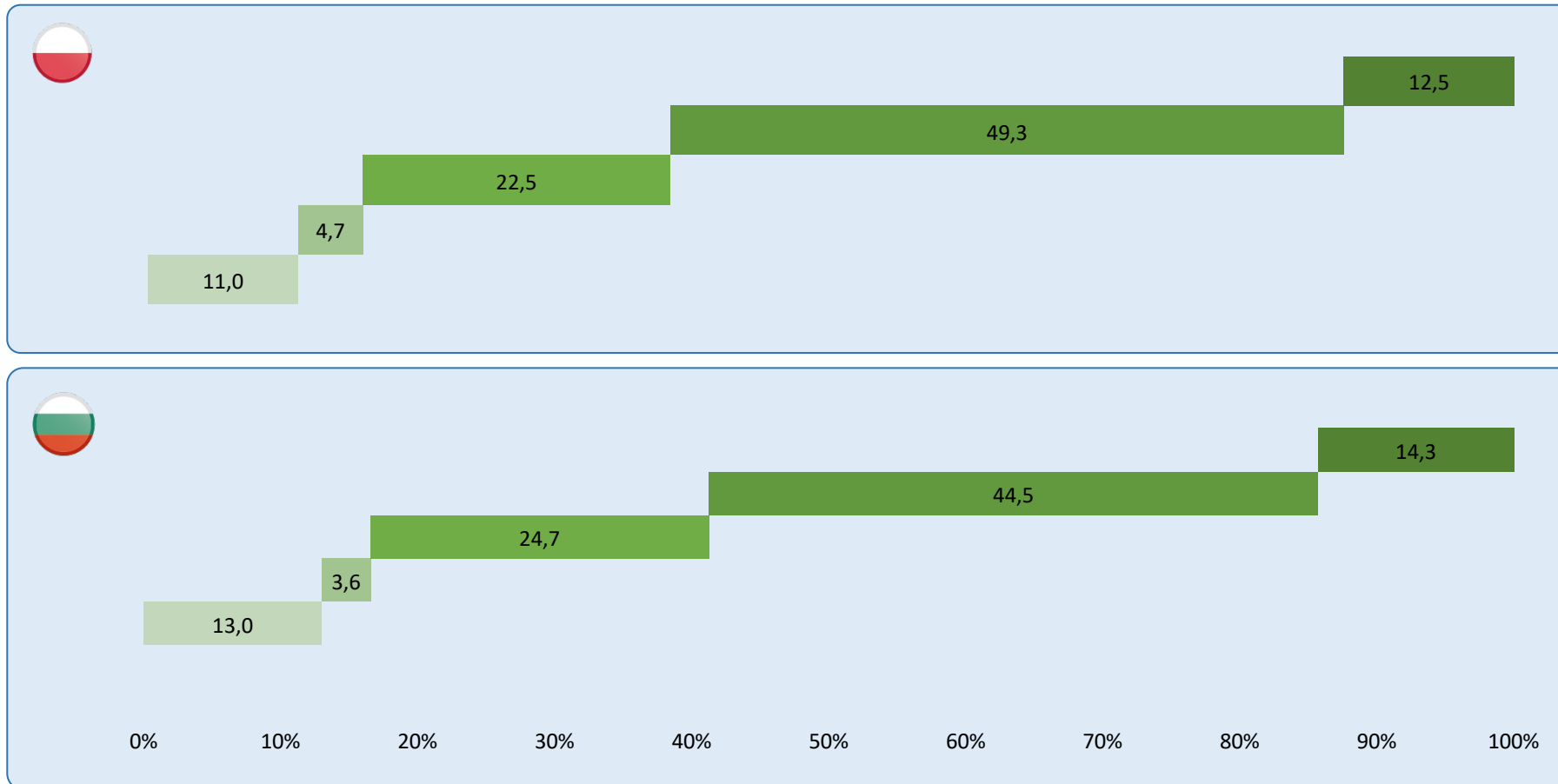


# Participants characteristics (Age range)





# Participants characteristics (Current economic situation)





# Part I

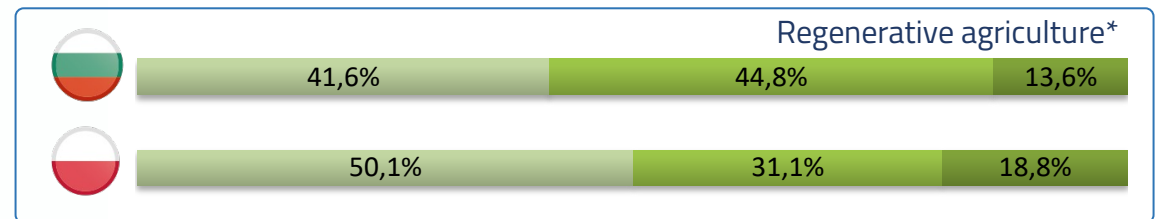
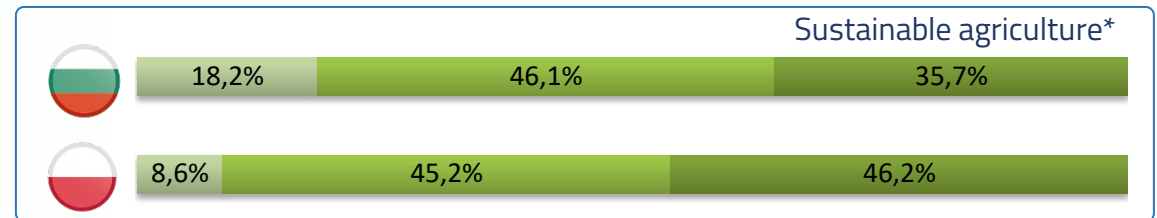
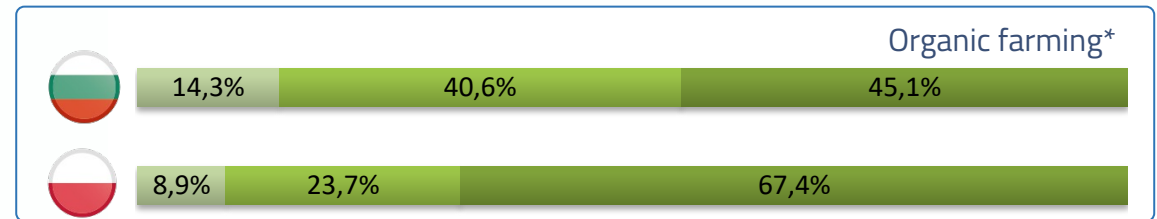
Familiar with regenerative  
agriculture





# Agricultural and farming terms

Polish consumers declare that they are familiar with terms related to agriculture and farming significantly more often than Bulgarian consumers.



■ I have never heard of it

■ I have heard of it, but I do not know its meaning

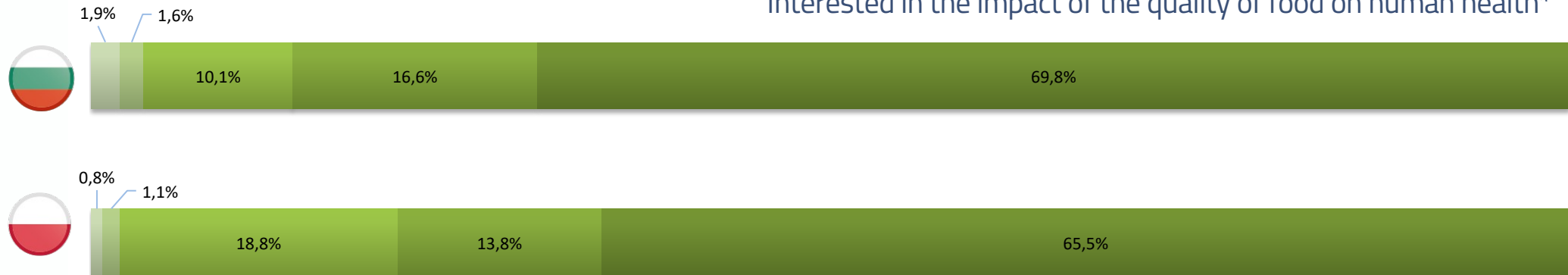
■ I have heard of it and I know its meaning

\*statistically significant differences

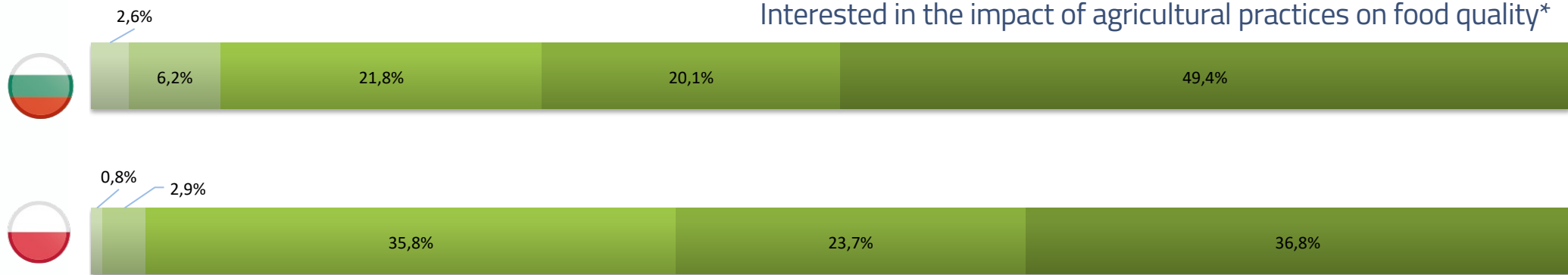


# The interest in the topics of agriculture/food/health

## Interested in the impact of the quality of food on human health\*



## Interested in the impact of agricultural practices on food quality\*



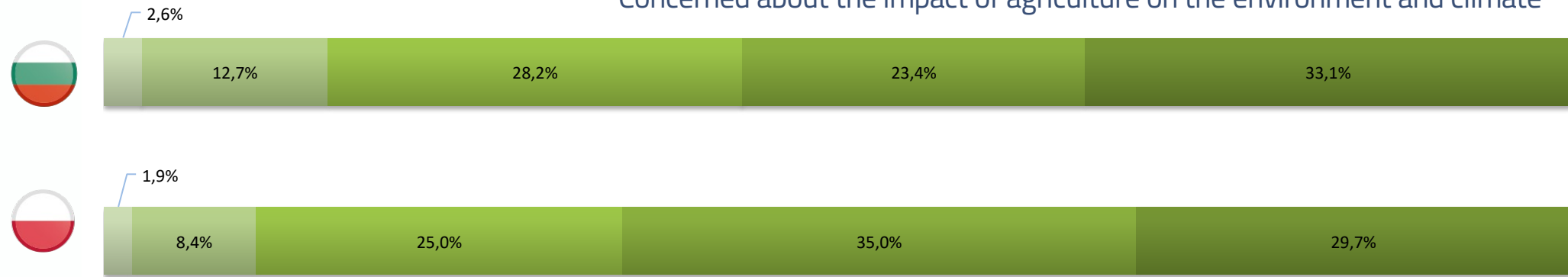
\*statistically significant differences

No interest at all
  Low interest
  Average interest
  High interest
  Very high interest

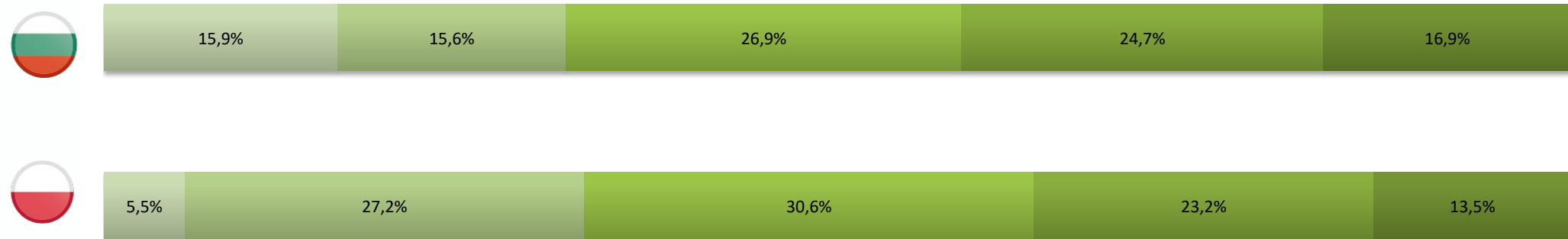


# The interest in the topics of agriculture/food/health

Concerned about the impact of agriculture on the environment and climate\*\*



Interested in the topic of agriculture\*\*



\*\* statistically non-significant differences

■ No interest at all    ■ Low interest    ■ Average interest    ■ High interest    ■ Very high interest



# Part II

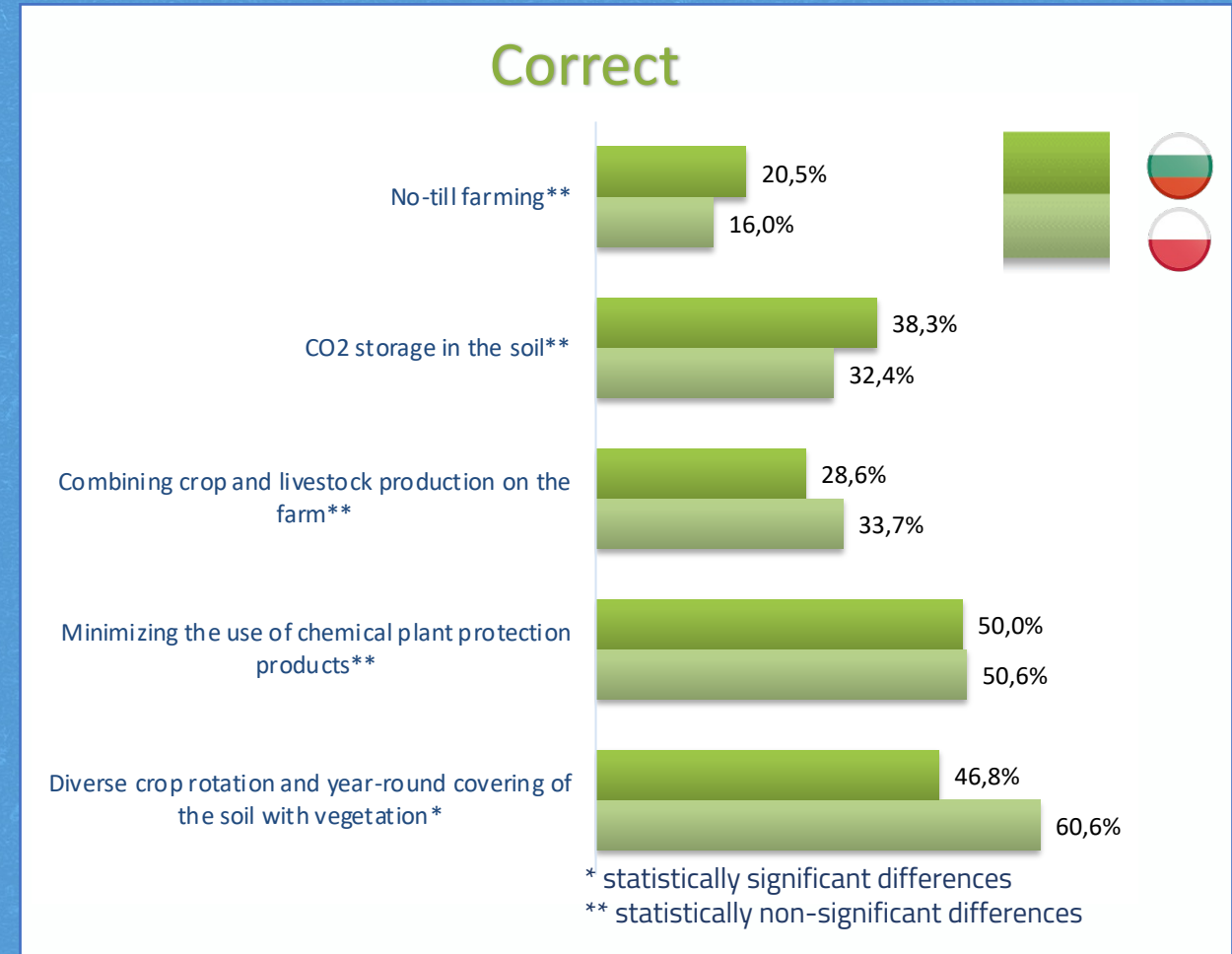
Activities/practices  
associate with regenerative  
agriculture





# Practices/activities related to regenerative agriculture

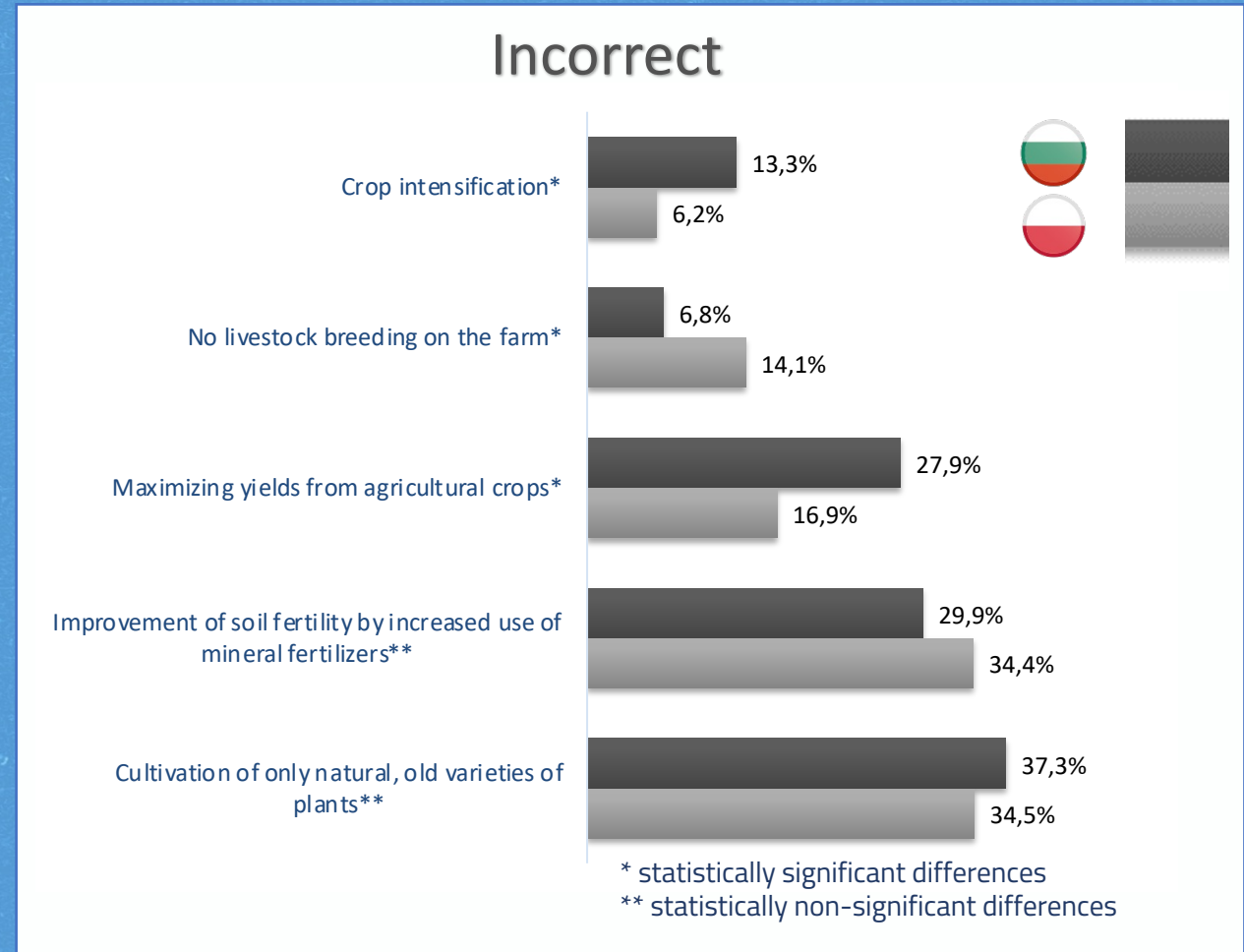
Polish consumers were significantly more likely to associate "regenerative agriculture" with "diverse crop rotation and year-round covering of the soil with vegetation" not Bulgarian consumers (60.6 vs 46.8%, respectively).





# Practices/activities related to regenerative agriculture

Bulgarian consumers were significantly more likely to incorrectly associate "regenerative agriculture" with "crop intensification" or "maximizing yields from agricultural crops" not Polish consumers. On the contrary, Polish consumers had incorrectly associate "no livestock breeding on the farm" more frequently than Bulgarian consumers.





# Part III

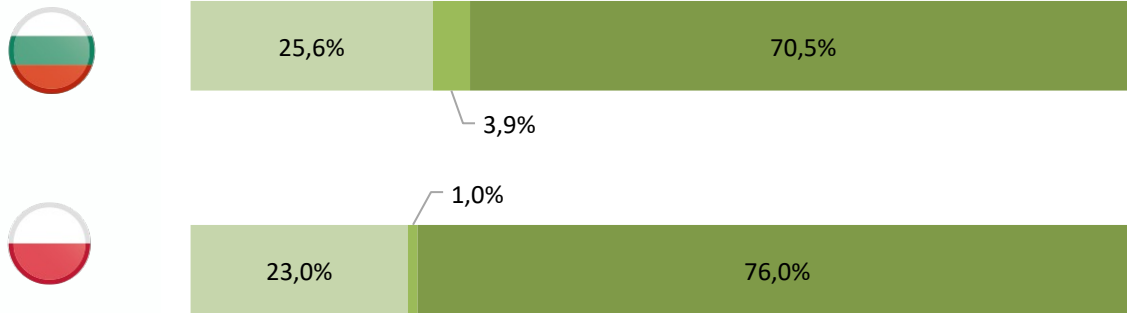
Impact of regenerative  
agriculture



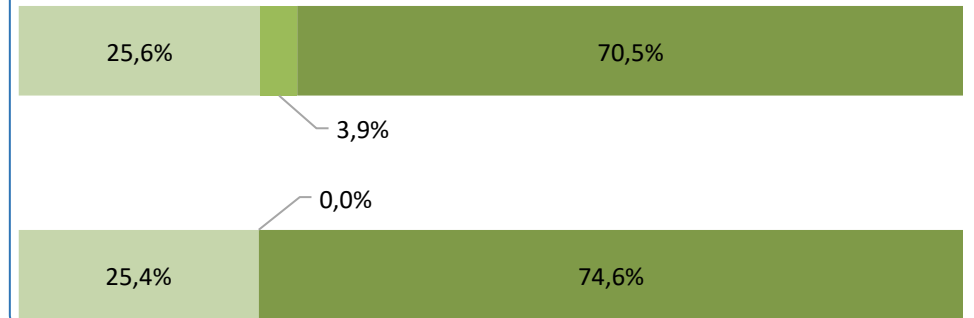


# Impact of regenerative agriculture practices

Protection of the Earth's climate and natural resources\*



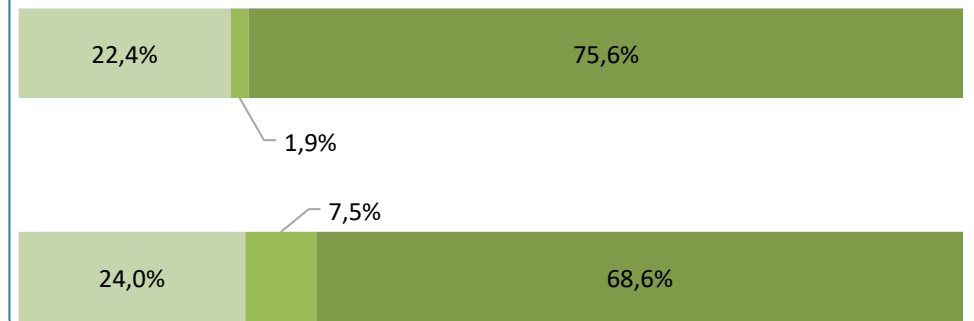
Microorganisms in the soil\*



Lowering the rate of soil erosion\*



Soil fertility\*



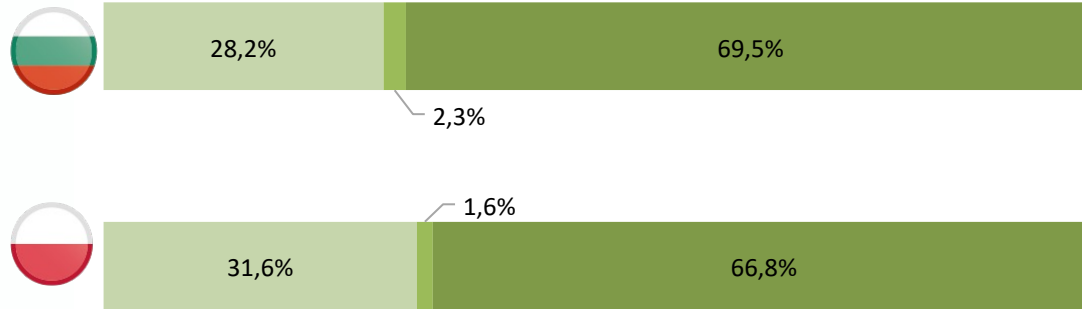
\* statistically significant differences

■ I don't know ■ No ■ Yes

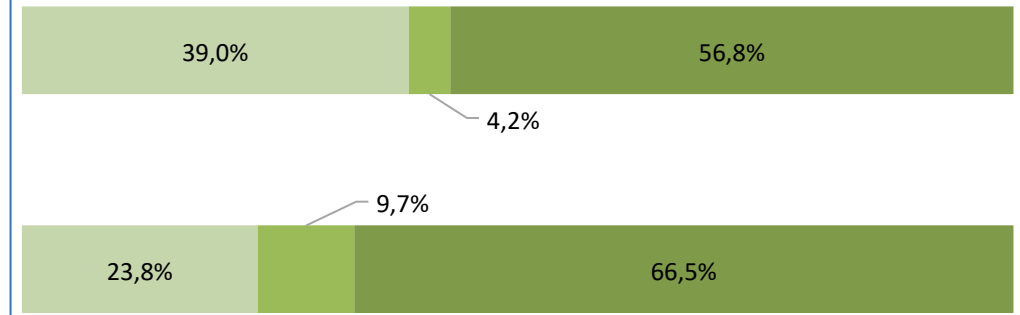


# Impact of regenerative agriculture practices

Biodiversity (plant species diversity)\*\*



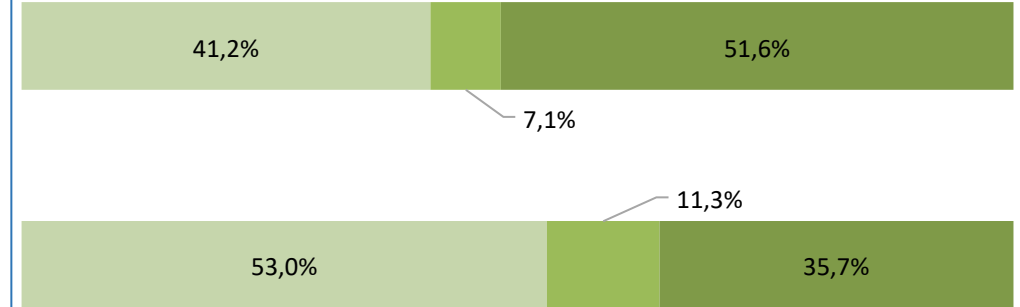
Retention of water in the soil\*



CO<sub>2</sub> storage capacity in the soil\*



Resilience of crops to climate change\*

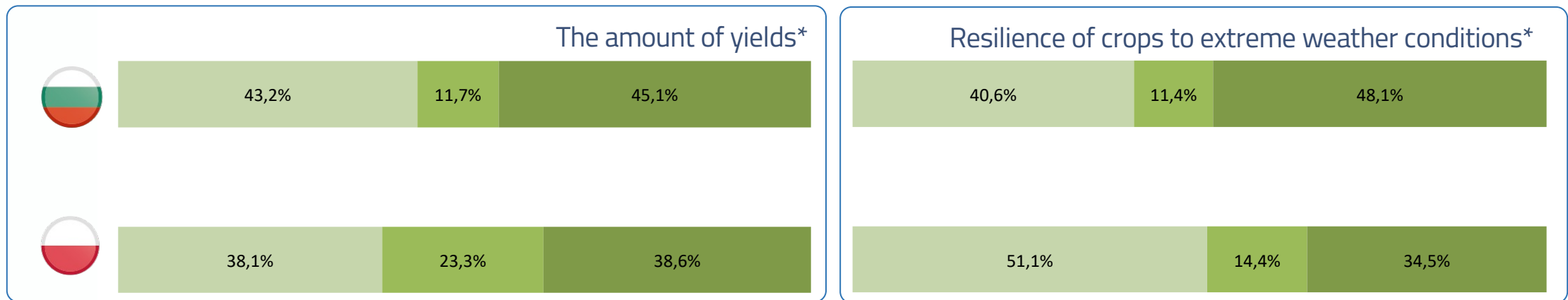


■ I don't know ■ No ■ Yes

\* statistically significant differences  
\*\* statistically non-significant differences



# Impact of regenerative agriculture practices



\* statistically significant differences

■ I don't know ■ No ■ Yes

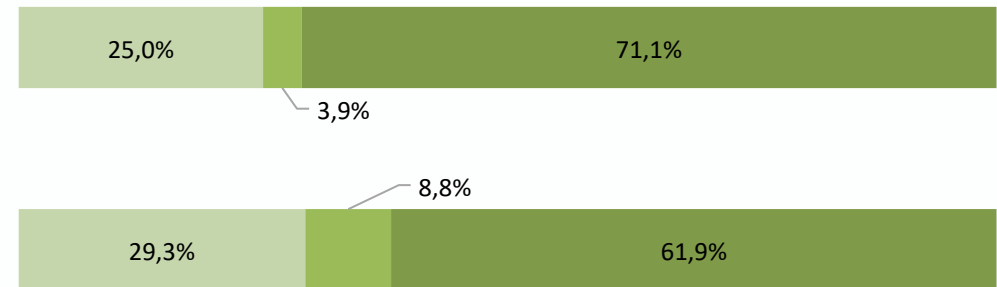


# Impact of regenerative agriculture practices

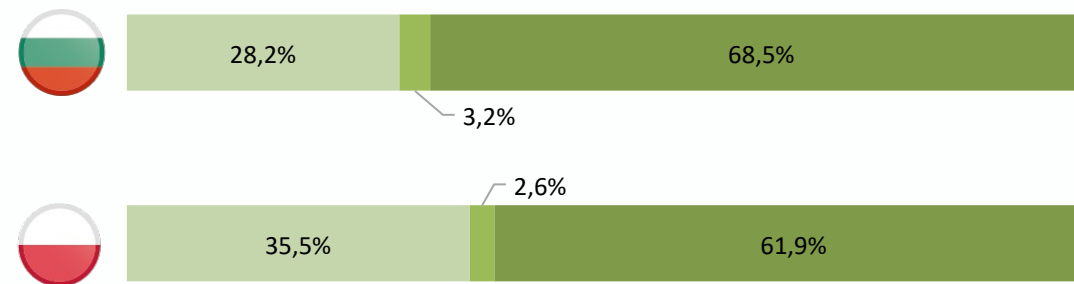
Increasing the amount of nutrients  
(e.g. vitamins and minerals) in food\*\*



Reducing the amount of harmful  
substances (e.g. heavy metals) in food\*



Reducing the amount of pesticides and other  
crop protection chemicals in food\*\*



\* statistically significant differences  
\*\* statistically non-significant differences

■ I don't know ■ No ■ Yes



# Part IV

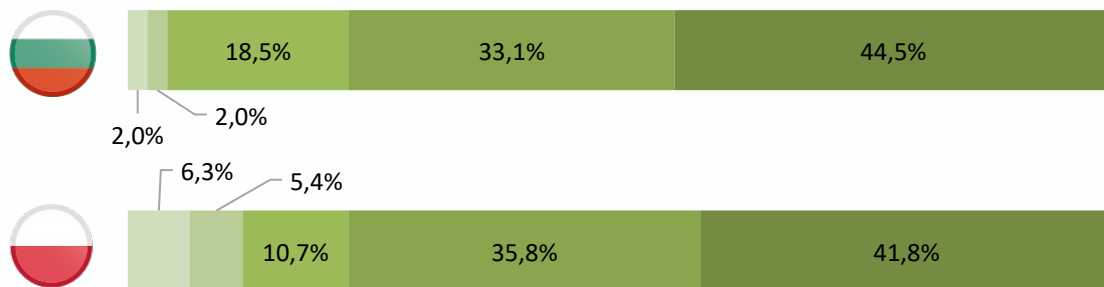
Opinion on regenerative  
agriculture and regenerative  
food production



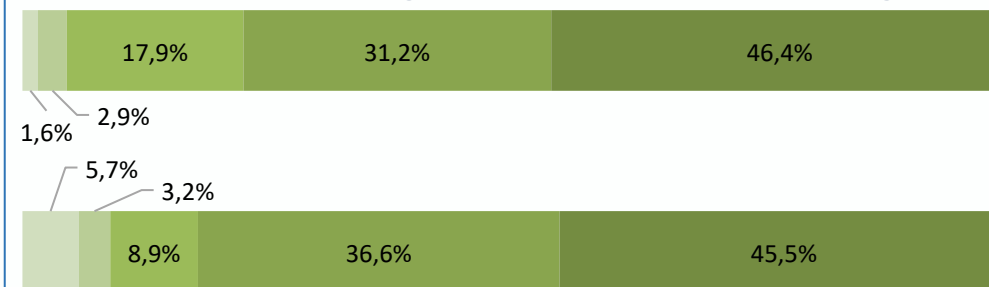


# Opinion on regenerative agriculture and regenerative food production

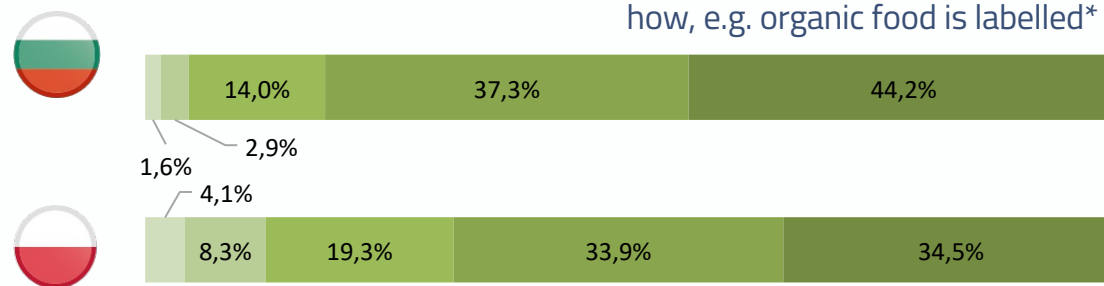
Farmers should be encouraged to implement the principles of regenerative agriculture\*\*



Food producers should pay more attention to the source of the agricultural products (e.g., whether they come from regenerative agriculture) they use to make their goods\*\*



Agricultural produce from regenerative agriculture and the food produced from it should be labelled with a special logo, similarly to how, e.g. organic food is labelled\*



\* statistically significant differences  
\*\* statistically non-significant differences

■ Strongly disagree ■ Rather disagree ■ Undecided ■ Rather agree ■ Strongly agree



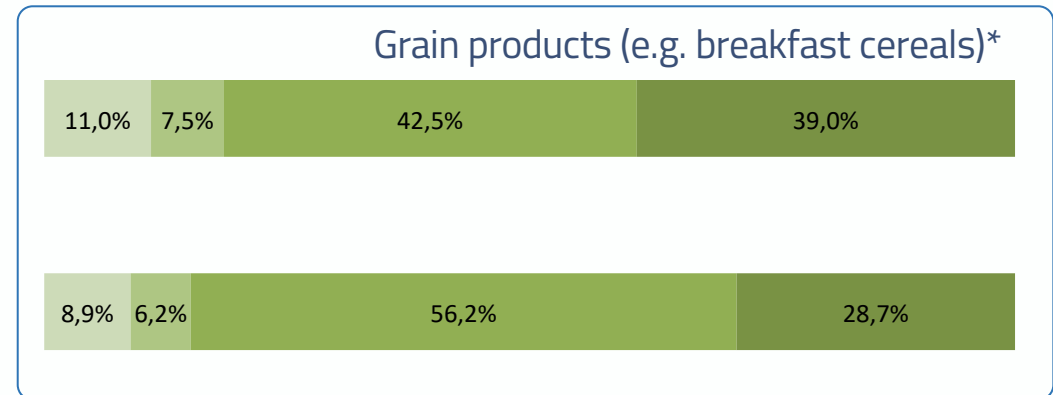
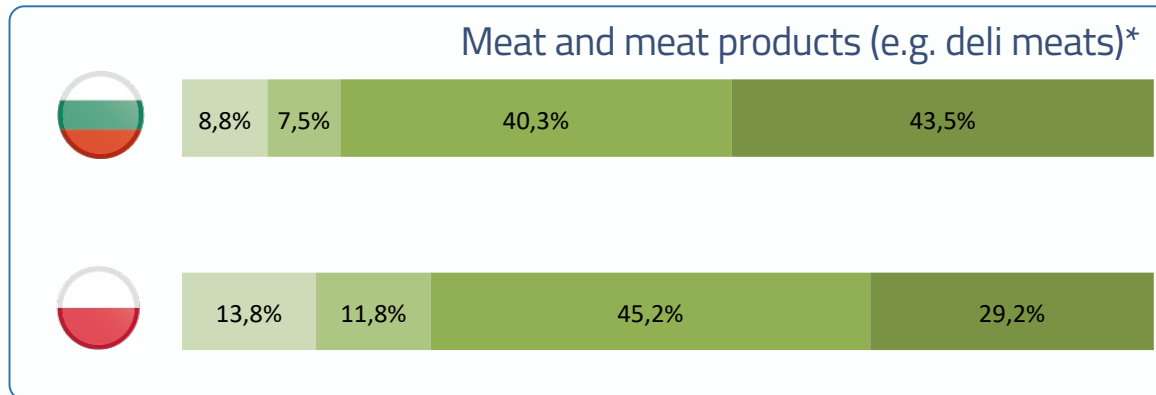
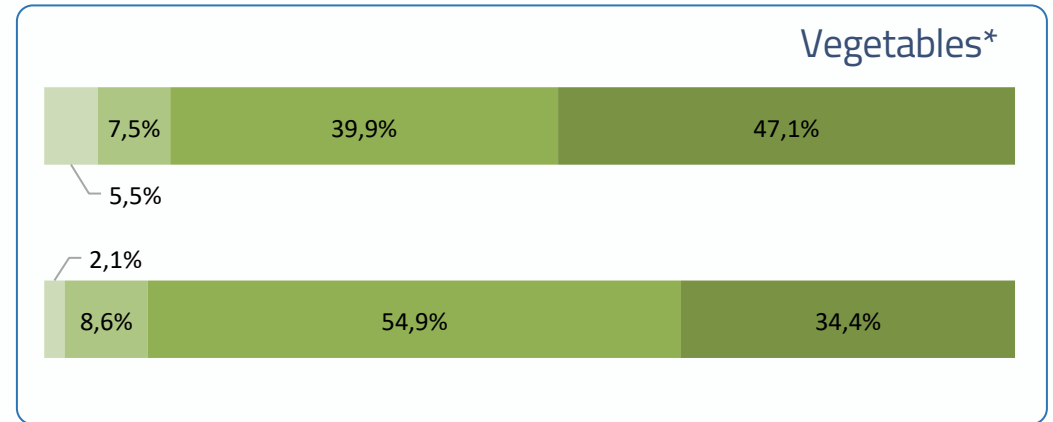
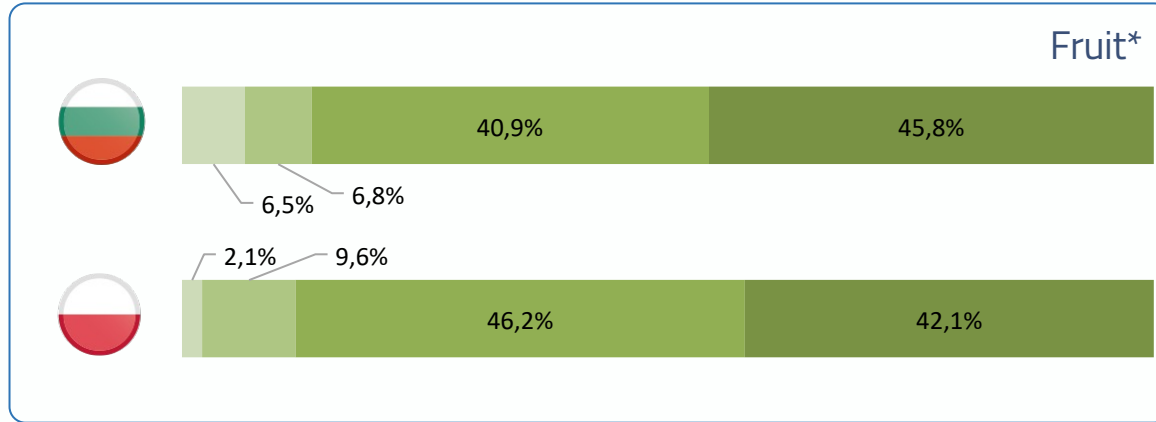
# Part V

Willingness to buy  
regenerative food





# Willingness to buy regenerative food



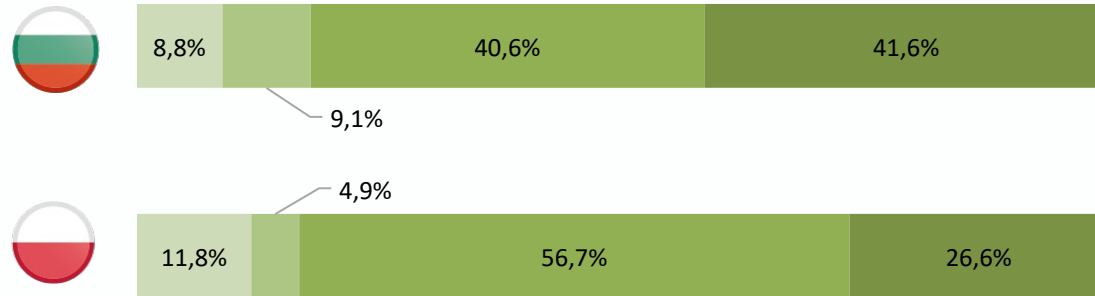
- I do not buy such products
- I will choose a non-regenerative agriculture product
- I will choose a product regenerative agriculture if it costs the same
- I will choose a regenerative agriculture product even if it is more expensive

\* statistically significant differences

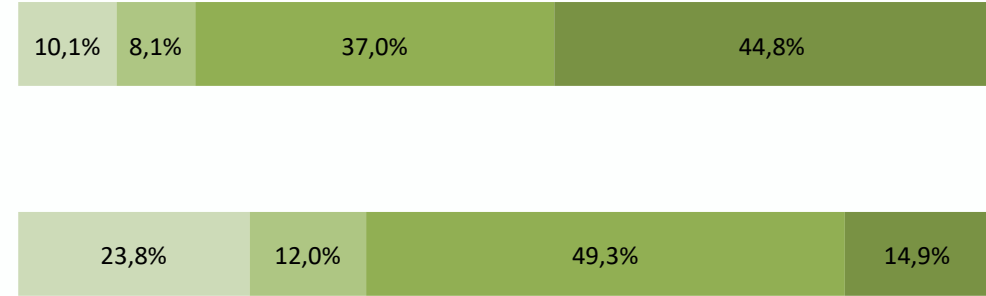


# Willingness to buy regenerative food

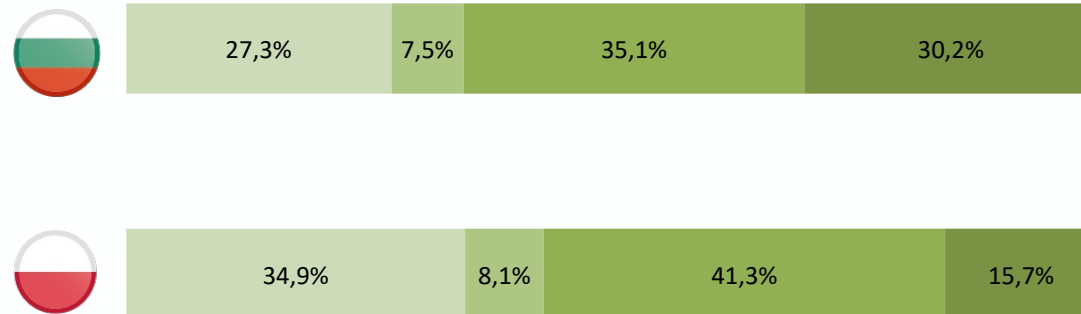
Dairy products (e.g. cottage cheese)\*



Milk\*



Plant-based milks (e.g. oatmeal, soya)\*



\* statistically significant differences

- I do not buy such products
- I will choose a non-regenerative agriculture product
- I will choose a product regenerative agriculture if it costs the same
- I will choose a regenerative agriculture product even if it is more expensive



# General conclusions

1. The term “Regenerative agriculture” has a low recognition rate of about 17%, which is significantly different from the recognition rates for terms such as “Organic farming” and “Sustainable agriculture”.
2. Less than half of the respondents (41%) expressed interest in the impact of farming practices on food quality.
3. When asked about which practise are linking with “Regenerative agriculture”, 56% of respondents mentioned diverse crop rotation and year-round soil coverage with vegetation, while 50% mentioned minimizing the use of chemical plant protection products.





# General conclusions

4. A large percentage of respondents were unaware of the positive impact of regenerative farming practices on crop yields (40%), resilience to extreme weather conditions (48%), and climate change (49%). However, about 65% of respondents recognized the positive impact of regenerative agriculture practices on soil health.
5. Consumers largely support the promotion of regenerative agriculture and food (about 80%) and the use of a special logo to label these foods (73%).





# General conclusions

6. Additionally, 43% and 39% of consumers would be willing to pay more for fruits and vegetables from regenerative agriculture, respectively. A high percentage of consumers would also be willing to buy regenerative meat and meat products, grain products, and dairy products if they were priced the same as conventional food.





# Contact

## **For more information :**

EIT Food Regenerative Agriculture Revolution

## **Contact details:**

Monika Linkowska, Project Manager

monika.linkowska @eitfood.eu



# Improving food together

[eitfood.eu](https://eitfood.eu)



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