

A Comparative Analysis of the Popularity of Regenerative Agriculture Practices in Poland, Germany, and Belarus

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INTRODUCTION & AIM

Regenerative agriculture is a holistic approach that restores soil health, biodiversity, and ecosystem services. Its practices include crop rotation, cover crops, reduced tillage, agroforestry, composting, and integrating livestock with crops.

Despite its growing recognition, limited knowledge exists regarding its practical adoption in Central and Eastern Europe.

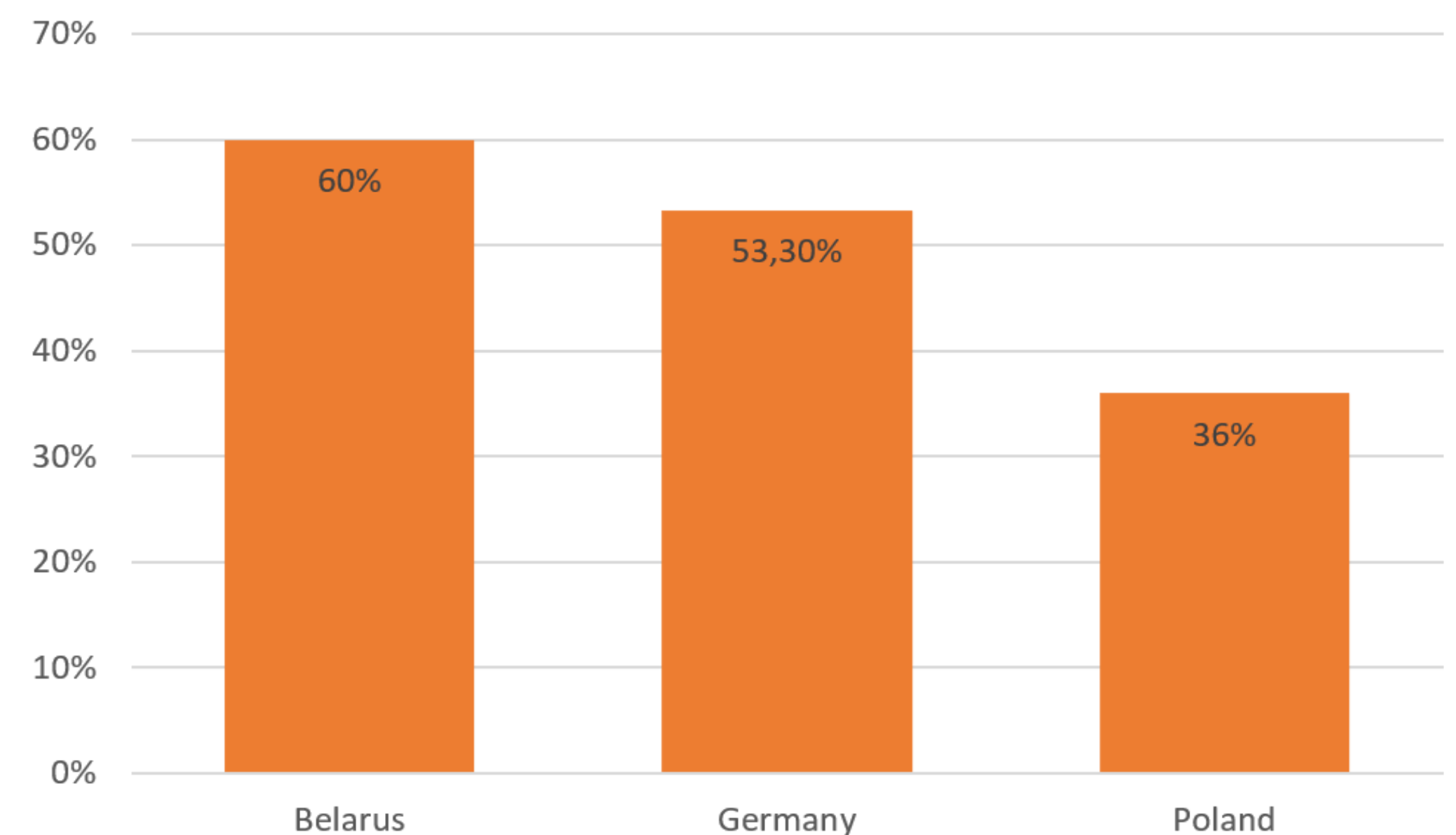
The research aim was to compare the prevalence of regenerative practices among farmers in Poland, Germany, and Belarus, countries in close geographical proximity, sharing very similar climatic conditions, but differing significantly in terms of culture, politics, and history. To achieve the research aim we designed a questionnaire-based survey

METHOD

The survey was divided into three parts. The first section collected demographic data such as farm size, type of production, farming experience, education, and gender. The second explored knowledge of and attitudes towards regenerative farming. The third measured the actual level of adoption of specific practices, using a scale from one- meaning never to five- meaning always. We distributed the survey online through farming groups on social media, through direct invitations sent to farms and agricultural organisations, and in paper form to include those not using digital media. The responses were gathered during the first half of 2025. In total, we collected 50 responses from each country, giving us a comparative sample of 150 active farmers. We used non-parametric tests for data analysis because the distributions of quantitative variables did not meet the assumptions of normality. The main analyses involved Kruskal-Wallis tests comparing the three countries as a whole. In addition, we performed subgroup comparisons to ensure that observed differences were not solely due to demographic imbalances. Significant results were followed by Dunn-Bonferroni post hoc tests. Across all analyses, we adopted a significance level of $\alpha < 0.05$.

RESULTS & DISCUSSION

Familiarity with the Term Regenerative Agriculture



The Most Popular Regenerative Agriculture Practices Between Three Countries

Belarus	Germany	Poland
-Changing crops on the same plots each season- crop rotation (e.g., after wheat, rapeseed, then potatoes, then soybeans)	-Simultaneous cultivation of different groups of plants in the same season, but in different locations (e.g., cereals, legumes, root crops, herbs)	-Maintaining plant cover on arable fields throughout the year (living plants or crop residues – leaving stubble, mulching, covering the soil with cover crops)
-Sowing crops after the main harvest (catch crops/cover crops) (e.g., directly after harvesting maize- mustard or phacelia)	-Changing crops on the same plots each season- crop rotation (e.g., after wheat, rapeseed, then potatoes, then soybeans)	-Planning the farm to maximise the use of natural processes (e.g., rainwater harvesting, composting)
-Careful minimisation of synthetic fertiliser and pesticide use (e.g., reducing mineral fertiliser doses, avoiding herbicides)	-Careful minimisation of synthetic fertiliser and pesticide use (e.g., reducing mineral fertiliser doses, avoiding herbicides)	-Using organic fertilisers (e.g., manure, compost, slurry)
-Using organic fertilisers (e.g., manure, compost, slurry)	-Using organic fertilisers (e.g., manure, compost, slurry)	-Regular measurement and adjustment of soil pH to maintain it within the optimal range for the crops being grown

CONCLUSION

-Awareness of regenerative agriculture exists to a comparable degree in Belarus, Germany, and Poland.
-The application of its practices differs between the three nations, with Belarus demonstrating the highest adoption rates.

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