



SHOWCASE farmer survey 2021: An overview of the first results across study areas

**Verena Scherfranz¹, Lena Schaller¹, Henning Schaak¹, Jochen Kantelhardt¹, Marie Kohrs¹,
Fabian Klebl², Kati Häfner², Anton Parisi², Annette Piorr² & Jabier Ruiz³**

*¹Universität für Bodenkultur, Wien (BOKU) // ²Leibniz-Zentrum für Agrarlandschaftsforschung (ZALF)
e.V. // ³WWF European Policy Office*

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Please note: The results presented here are based on an interview survey with 50 farmers located in 10 different study areas across Europe. In each study area, 5 farmers participated in the survey. Due to the small sample size, the results shown in this handout need to be interpreted carefully. Particularly, the findings are not representative for the general situation in or across the study areas, but only reflect individual farmers' views.



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What is it all about?

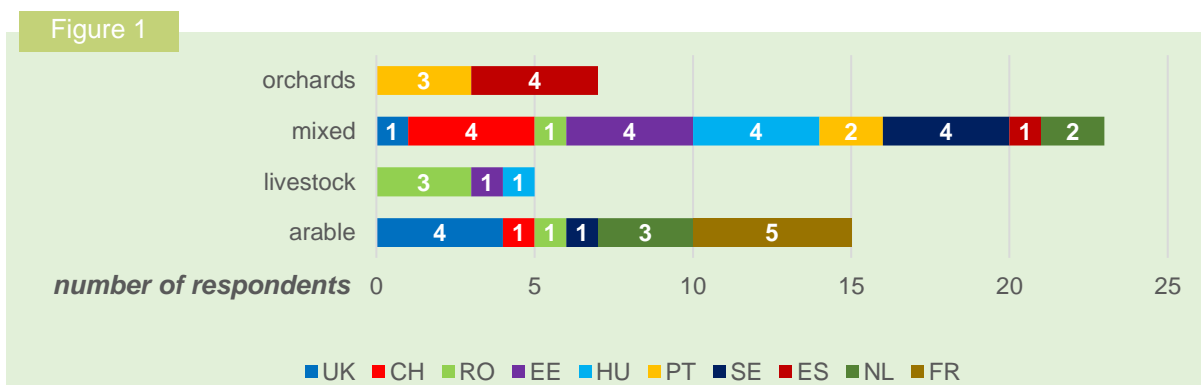
Biodiversity is declining at a worrying pace all around the world. Also in agriculture, the diversity of habitats, within and between species is decreasing. Depending on the region, intensification or abandonment of farming activities as well as a loss of landscape elements such as hedges are main drivers. Through managing their land in a sustainable way, farmers, in consequence, substantially contribute to fighting the loss of biodiversity. This means: Maintaining food production on the one hand and fostering nature conservation on the other hand. The EU research project SHOWCASE aims to find management practices that are particularly suitable to balance these two aspects. To this end, ecologists, economists, consultants and farmers work together in ten study areas all across Europe.

An essential first part of this project is to find out how farmers feel about biodiversity-friendly farming and what motivates them to implement such management practices. For this purpose, we carried out a survey in autumn and winter 2021/22. We interviewed 50 farmers across the study areas in the UK, France, the Netherlands, Switzerland, Portugal, Spain, Hungary, Romania, Estonia and Sweden. This handout shall give a brief overview of the first results. Even though the findings are not generalizable due to the small sample size, they give valuable insights about biodiversity-friendly farming across the study areas.



From peach orchards in the South to pea fields in the North: Which farms were included in our survey?

Thanks to the many study areas included in our project, we could collect insights, opinions, and perceptions from farmers with very diverse backgrounds. To name some examples, our sample includes farms of different type, management and size. The following figures shall give you an overview of the sample's diversity. **Figure 1** shows that most farmers in our sample run mixed farms (23) that combine, e.g., animal husbandry and arable farming. Also specialized arable (15), orchard (7) and livestock farms (5) are included.



The different **farm sizes** across the sample are presented in **Figure 2**. This gives a first idea of how different the conditions are with which farmers in our sample have to cope. Most farms range from 100 to 499 ha (25), but we are also able to consider the views of very small- (less than 1 ha) and very large-scale farmers (more than 1,000 ha).

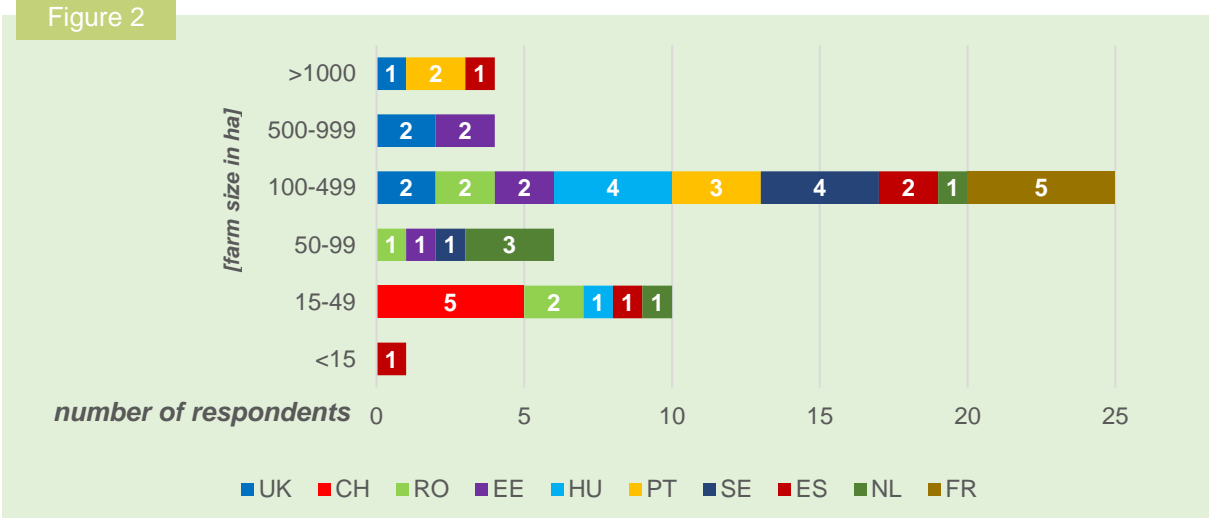
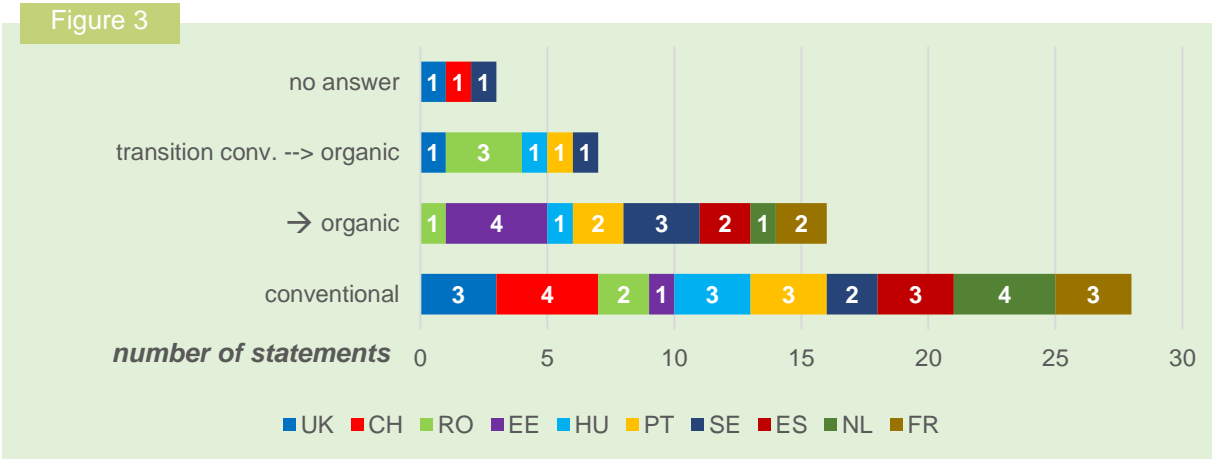


Figure 3 gives an overview of the **management** applied on the farms. Most interviewed farmers run conventional farms (28), whereas 23 farms are either organic or currently in transition to become organic. Please note: Since some farms include both conventional and organic plots, the number of indications does not sum up to 50.



Let's have a look at the characteristics of the **interviewed farmers**: Overall, most farmers (31) who are included in the survey are between 40 and 59 years old. Only five farmers are female. Compared to the EU average, the number of interviewed farmers who hold a university degree (24) and/or have completed a farmer education program (26) are very high. These numbers suggest that our sample is not representative, not least due to the small sample size. The views of farmers presented on the next pages therefore do not necessarily reflect the views of other farmers. This has to be kept in mind when reading through.



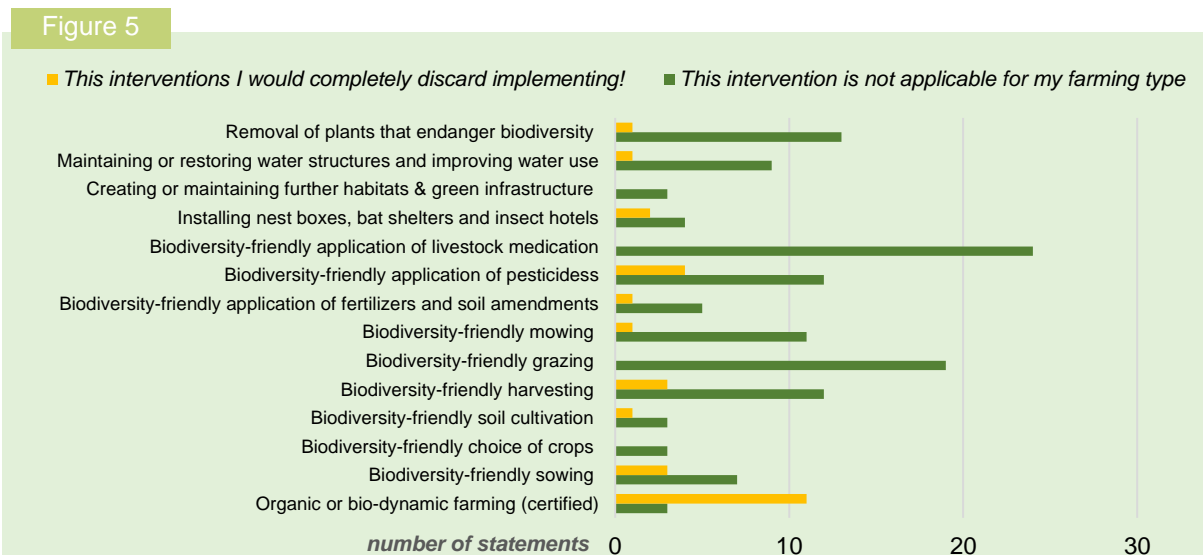
Biodiversity-friendly farming: What is already implemented – and what is not?

To see how biodiversity-friendly farming is like in the study areas, we asked how the farmers have adapted their management. **Figure 4** shows the results, namely the number of interviewed farmers per study area applying certain biodiversity-friendly management practices. We found that creating habitats and green infrastructure is most common across the study areas. Farmers also commonly choose biodiversity-friendly crops and adapt their soil management, fertilization and mowing in a biodiversity-friendly way. In contrast, removing plants that endanger biodiversity and converting to organic/bio-dynamic farming seem less relevant.

Figure 4

	Organic/bio-dynamic farming (certified)	Biodiversity-friendly sowing	Biodiversity-friendly choice of crops	Biodiversity-friendly soil cultivation	Biodiversity-friendly harvesting	Biodiversity-friendly grazing	Biodiversity-friendly mowing	Biodiversity-friendly application of fertilizers & soil amendments	Biodiversity-friendly application of pesticides	Biodiversity-friendly application of livestock medication	Installing nest boxes, bat shelters and insect hotels	Creating or maintaining further habitats & green infrastructure	Maintaining or restoring water structures and improving water use	Removal of plants that endanger biodiversity
EE	4	4	4	2	2	5	5	4	0	4	2	4	2	0
NL	1	2	5	5	2	3	4	3	3	2	4	5	2	1
UK	1	4	5	5	0	2	3	5	5	2	4	5	3	2
RO	2	2	4	2	2	4	4	2	2	4	1	3	3	2
HU	2	3	2	3	4	5	4	4	2	3	0	4	3	5
ES	2	2	4	5	4	1	3	4	5	1	3	5	5	0
PT	3	3	4	5	5	3	2	5	5	2	3	5	5	4
CH	0	3	5	5	0	2	5	3	4	3	4	5	0	4
SE	4	2	5	4	2	5	3	4	2	3	3	4	4	2
FR	2	2	5	3	1	0	3	5	3	0	4	4	1	1
Sum	21	27	43	39	22	30	36	39	31	24	28	44	28	21

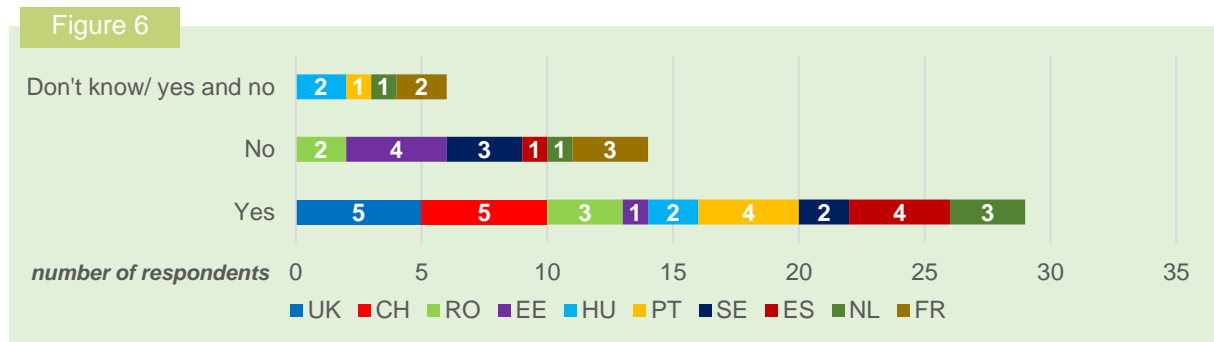
Additionally, we aimed to understand why farmers have not (yet) implemented the remaining management practices. As shown in **Figure 5**, we found that certain management practices (“interventions”) are not applicable, for instance due to farmers’ specialization on crop or livestock production. Amongst the interventions that are theoretically applicable, farmers are most reluctant about organic/bio-dynamic farming: Eleven farmers disapprove of that. Four farmers were found to disapprove of the biodiversity-friendly application of pesticides.





**There are numerous public incentives to promote biodiversity.
But are they effective?**

Across the study areas, we identified a number of incentives that shall help farmers to farm in a more biodiversity-friendly way. Most of them are based on financial compensation, such as agri-environmental schemes, organic or integrated production programs, payments for ecosystem services or certifications along the agricultural value chain. However, we still know little about how satisfied farmers are with their impact on biodiversity. Therefore, we asked farmers if they feel that public incentives are effective in promoting biodiversity in their area. **Figure 6** shows the answers. The majority of farmers (29) thinks that existent public incentives help to improve biodiversity, whereas 14 farmers think they do not. Seven farmers are not sure about the incentives' effect.



Whereas the majority of interviewed farmers in the UK, Switzerland, Portugal and Estonia is satisfied with the effectiveness of public incentives, farmers in Estonia and France are more skeptical. The main reasons for the perceived lack of effectiveness include:



... the **inflexible design**. One farmer from France illustrated: *“The implementation of the programs is too constraining and should be done together with farmers in order to come up with measures that are effective and adapted to the agricultural context.”*



... the **wrong targeting**. One farmer from Spain reasoned: *“I believe that subsidies should be oriented to environmental problems. [...] they should tell us which measures really help the environment in each crop, and acknowledge what is already helping.”*



... too much **short-term thinking**. One farmer from Sweden explained: *“There is also a lack of long-term perspective in the support system. The support system only applies to short periods of 3 to 5 years. But if you build an animal stable, for example, it is for 25 years.”*



... a **lack of monitoring**. One farmer from Portugal would like to know more about the effectiveness, but: *“The measures applied are not monitored. I don't know if these programs have a real effect on biodiversity. Part of the monetary incentive should be used to monitor and measure biodiversity.”*

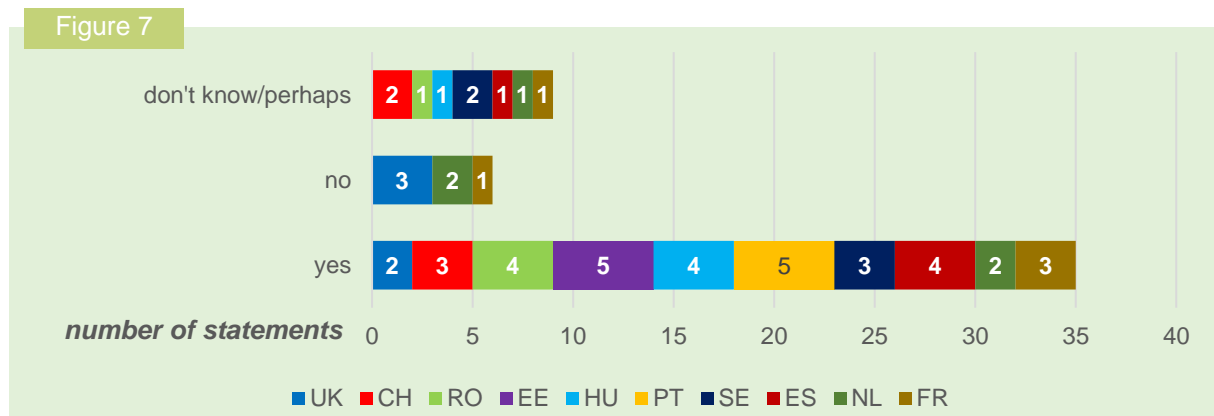


... a **lack of control**. One farmer from Spain stated: *“Also it is needed more control about how they are implemented in reality.”*



New approaches to incentivize and motivate farmers' endeavors to protect biodiversity: What are the pros and cons?

There is an intensive political debate going on about how to design new agri-environmental programs. Instead of being compensated for sticking to pre-described management measures (action-based payments), farmers could be paid for the environmental results they achieve (result-based payments). To achieve these results, farmers are free to decide which management practices they apply: Only the environmental outcomes, measured through suitable indicators such as certain species, will be remunerated in the end. Usually, farmers are supported through specific training and advice and can also participate in monitoring the results. Overall, this approach is argued to take into account farmers' expertise and profound knowledge of their farmland, to activate farmers' entrepreneurial motivation and to increase their innovational power to "produce" environmental outcomes. However, it also comes with some drawbacks. We asked farmers what *they* think about this new approach, more precisely: "Could result-based payments be advantageous for improving biodiversity on your farm compared to the classical programs?". **Figure 7** shows the responses to this question.



Most distinctly across study areas, the interviewed farmers in Estonia, Portugal, Spain, Romania und Hungary were widely positive about this approach. Particularly farmers in the UK and the Netherlands were more skeptical.

Some farmers like the idea of having result-based payments **additional** to the already existing programs, as mentioned by a farmer from Estonia: "They should be initiated in addition to already existing programs, not as replacements of existing programs." Other farmers came up with **mixed or top-up models**, i.e. receiving result-based payments in combination with action-based programs. Action-based payments make sure that farmers are compensated for the cost of management measures, whereas result-based payments are an additional bonus which farmers are paid if they reach the pre-defined biodiversity results. One farmer from the Netherlands put it like this: "The farmers' effort and investments in nature management must be rewarded, this must be a certain basis to whatever measures [...]. This should definitely be safeguarded. Maybe result-based payments could work as a bonus system?"

Although most of the farmers are positive about the new approach (see above), they also came up with several weaknesses. Overall, we could collect a variety of perceived **pros** and **cons**, out of which we can only present some examples here, such as...



... the **insecure payment**. Some farmers stated that, given that natural conditions are not always favorable and that the natural potential of agricultural land differs, payments might not be perceived as fair. One UK farmer, for example, stated: *“Some farms are limited in the potential species that could come - it's not fair that some farms could get rare species and others would not be able to for reasons beyond the farmer's control.”*



... the **level of knowledge required**. Some interviewees mention that farmers are trained for farming rather than conservation. Therefore, they might not be able to reach the pre-defined results, even if they put in a lot of effort. This increases the financial risk for farmers, as stated by one UK interviewee: *“It's too risky. I think two thirds of landowners would pull out. I know how to grow crops, but I don't know how to grow a butterfly.”*



... **flexibility in management** which also **increases effectiveness and efficiency**. Farmers stated that they want to be flexible about where and when to implement suitable management practices. With result-based approaches, farmers can consider the specific context of the local particularities, as described by a farmer in Portugal: *“These models are more fair and flexible and can be more effective, as classic models may be incompatible with the specific context of a particular [...] farm.”*



... the **sound monitoring**. Farmers are skeptical that controlling the results would work well. For example, they doubt that indicator species are always present on the day of the control, so the natural context and insecurities need to be considered in monitoring as well. One farmer from Sweden stated: *“[...] But how you define whether something is 'working' is very important, and with biodiversity, that is really complicated. Any assessment system would have to be more advanced than just counting 'indicator species', because that is not enough, and/or does not tell the whole story.”* Additionally, some farmers point out that the time to count the indicator species is limited and think that controllers may not have enough knowledge. Additionally, the risk of cheating, related to the question of who should carry out the monitoring, was mentioned by some farmers.



... the **increased motivation** of farmers: For some farmers, it would be stimulating to get result-based extra payments. Additionally, they argue that this new approach could improve self-responsibility as well as farmers' views on conservation. One farmer from Hungary stated: *“[...] this would [be] more motivation for farmers, and this may have an attitude-forming effect.”*



**Regardless of the agri-environmental program or incentive approach:
What affects farmers' decisions to farm in a more biodiversity-friendly way?**

We found that the interviewed farmers have already implemented numerous biodiversity-friendly management practices. But what is it that drives their motivation to do so? This is another issue which we discussed during the interview. In line with other studies, we found a large variety of aspects that can help to explain. Our analysis on this question is not complete yet, but we could already observe the influence of...



... **personal or internal factors.** Farmers might come to different conclusions about implementing or not implementing biodiversity-friendly management practices depending on their individual world view, their moral and philosophical views of nature, their sense of ecology or their relationship to flora, fauna and the landscape. A farmer from Switzerland mentioned, that he/she feels "*the inner pull to protect the environment*". In contrast, some farmers might rather identify themselves with production- or profit-orientation or have a strong preference for "tidy" landscapes, leaving biodiversity protection secondary.



... **operational factors.** This aspect refers to feasibility and costs of biodiversity-friendly management practices. Put simply: The less they cost and the better they fit the current management, technological facilities, farm capacities or the weather, the more likely a farmer is to implement. Not surprisingly, sufficient financial compensation through payment schemes is a factor that seems to substantially influence the interviewed farmers' willingness to farm in more biodiversity-friendly way.

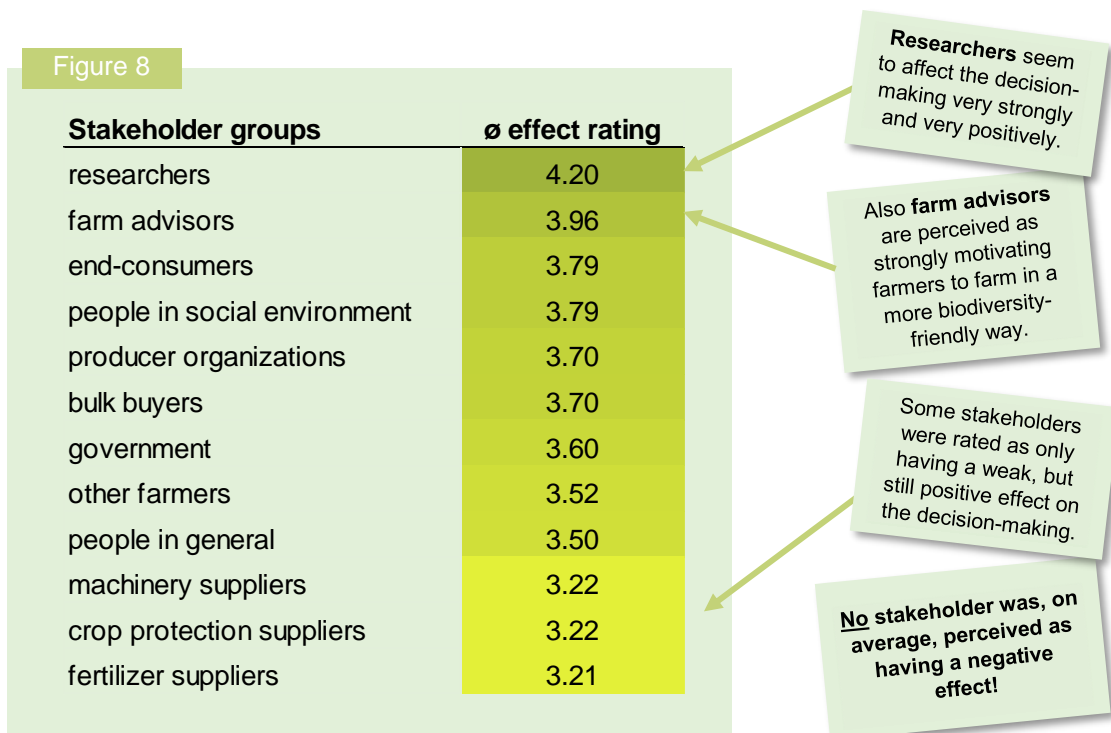


... **social factors.** Farmers, such as other entrepreneurs, do not make decisions in an isolated way: They are influenced by their social and institutional environment, including (social) media, local communities or consumers. Also their education, access to information or cultural factors as well as individual preferences, identities and goals related to other people can affect farmers' decisions. To illustrate: One farmer from Portugal stated that "*We also have to be accountable, not only to our region, but also to the consumer [...] and I think this is an important motivation. It gives us power, but it also gives us quite a big responsibility*". Commonly, social factors are rather motivating farmers' pro-biodiversity decision-making. However, they can also act in a demotivating way, in case the farmer had bad experiences with other parties involved in a specific biodiversity initiative. Additionally, social or –on a broader level–political goals might be conflicting and require the farmer to weigh up one against the other. A highly intensive crop, for instance, might generate labor and wealth in the region. At the same time, it might harm biodiversity which society wishes to protect.



**Social factors and actors
seem to play an important role in farmers' decision-making.
But who are the most relevant actors?**

As shown before, various actors in the farmers' social and institutional environment ("stakeholders") might play a role when farmers make biodiversity-related decisions. To better understand why farmers implement biodiversity-friendly management practices, it can be helpful to identify the most influential stakeholders. We therefore showed farmers a list of different stakeholders and asked them to indicate how strongly these stakeholders affect their decision-making. To this end, we used a five-point scale ranging from 1 ("very strong negative effect on the decision-making") to 5 ("very strong positive effect on the decision-making"). 3 represents the neutral middle ("has no effect"). Figure 8 shows the average ratings across the interviewed farmers.

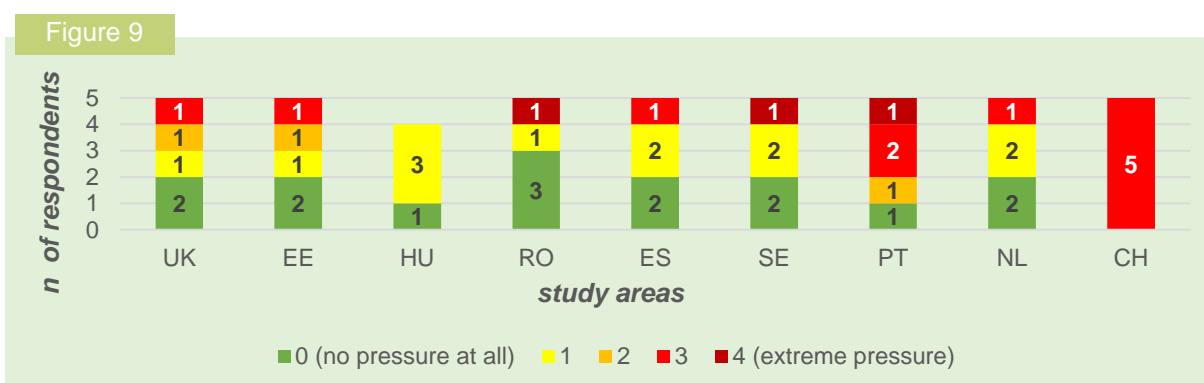


Given that the results hold when they are re-checked in a large sample, the stakeholders with the strongest effect could become further important partners in improving farmland biodiversity. They could help to raise awareness for biodiversity protection, inform about corresponding initiatives and spread relevant findings from science amongst farmers. They could also be involved in pro-biodiversity initiatives such as policies or media campaigns and act as mediators to, for example, create a trusted link between farmers and the government.



**Between pressure and motivation:
The role of society in biodiversity-friendly farming**

As shown, also the general public seems to play an important role in farmers' decision-making. Whereas some farmers perceive this role as motivating, others perceive it as being put under pressure. To get a first impression of the extent to which farmers feel the social pressure, we asked them to rate it on a scale from 0 ("no pressure at all") to 4 ("extreme pressure"). The results are presented in Figure 9.



Whereas social pressure feels relatively intensive for many interviewed farmers in Switzerland and Portugal, it is less distinct in other study areas. For many farmers, (social) **media** plays an important, either negative or positive role in this context. One farmer from Estonia stated: *"I feel (positive) social pressure from media and I like to find the best solution for biodiversity."* However, a Portuguese farmer feels very exposed to complaints through social media.



Some farmers experience social pressure through **changes on the market**. On one hand, some farmers feel that increasing demands come without the willingness to pay more money for the product. On the other hand, some feel that new opportunities are opening up. A Romanian farmer imagines: *"If the people will search for eco products and will want to pay more for those products, I could produce less and earn the same."*



When talking about social pressure, some farmers mentioned their **good management practices**. Knowing that they already do a lot for nature helps them to cope with the pressure. One farmer from the Netherlands argued: *"There is pressure, but not with a personal influence on me. It does however affect my motivation, maybe by preserving goodwill to stay ahead of pressure."*



For several farmers, social pressure is closely related to **little agricultural understanding** from society. One farmer from Switzerland explains it like this: *"They set many demands although they have little knowledge and understanding of agriculture. Everyone wants to discuss along and be included in the decisions of farming [...]."* Given that society knows little about farming, some farmers state that they have to improve communication with society.



Thank you for reading this summary about the first results of the SHOWCASE survey. If you are interested to learn more about the project, please visit <https://showcase-project.eu/>. Further results will be published soon.



We would like to take the opportunity to thank the farmers who provided valuable insights into their farm management.

These results will help to improve our understanding of how farmers think about biodiversity-friendly farming and what drives their decisions to implement sustainable management practices. Overall, this survey was conducted to inform further research tasks within the EU project SHOWCASE and, in a final step, to suggest innovations in future policy design.

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⁴Swedish University of Agricultural Sciences (SLU) // ⁵Agencia estatal consejo superior de investigaciones científicas // ⁶Universidade de Évora // ⁷Universitatea Babeş Bolyai // ⁸Agroscope // ⁹Wageningen University & Research // ¹⁰Centre national de la recherche scientifique // ¹¹University of Reading // ¹²Eesti Maaülikool // ¹³Ökológiai Kutatóközpont,

This overview is a summary of: Lena Schaller, Verena Scherfranz, Jochen Kantelhardt, Marie Kohrs, Kati Häfner, Fabian Klebl, Anton Parisi, Annette Piorr, Jabier Ruiz, Anneli Adler, Elena Velado Alonso, Sílvia Barreiro, Flaviu Valentin Bodea, Viviane Broenniman, Maura Ganz, Reinier de Vries, Alice dos Santos, Amelia Hood, Alice Mauchline, Indrek Melts, Niklas Möhring, Popa Razvan, Andrew Ruck, Flóra Vajna (2022). **Report on EBA incentives, drivers and key determinants of uptake of biodiversity management by farmers. Deliverable D2.2 EU Horizon 2020 SHOWCASE Project, Grant agreement No 862480.**

