Insights of the organic seeds and breeding ecosystem in Europe

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Organic seeds and breeding ecosystem in Europe

Organic FOOD & SEED market

no. of **organic producers** in the EU is increasing

top 3 countries by organic production in million hectares
FR, ES, IT

largest **markets** for organic food are **DE, FR, IT, CH**

EU Organic Regulation requires the **use of organic seeds**

Green Deal & Farm2Fork
25 % of the total farmland should be organic

the EU organic seed market has been **growing steadily**, driven by increasing **demand for organic products** and **growing awareness**

big differences between countries (organic seed market development and implementation of regulations)

poor implementation of EU legislation requirements on a national level

the **use of non-organic seed** is still very high in most countries

EU organic seed market was valued at around **300 million €** in 2019 (EC)

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Survey on the European organic seed and breeding sector

Objective of the survey

Main aim of the survey is to detect technical, economic, and regulatory challenges that organic seed producers face, and to analyse market opportunities that new organic trends are imposing for 2023 and upcoming years!

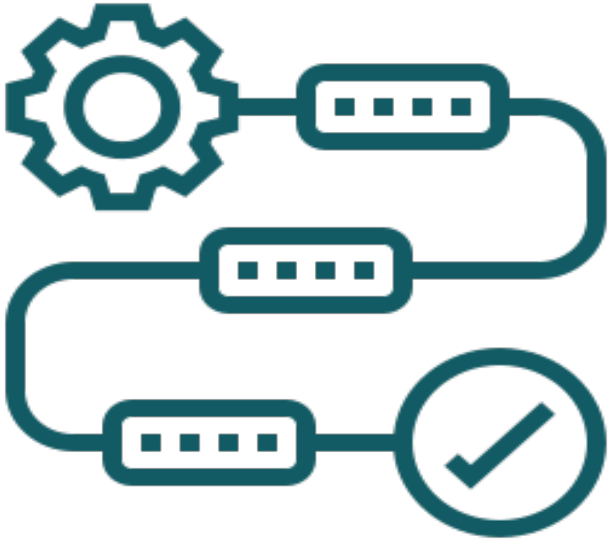
Methodology

51 questions- regarding the European **organic seed and breeding market**

English + all consortium languages

the survey was prepared in the **Survey Sparrow app**

The survey received **140 responses** in total, most of them coming from countries from **Central EU and Switzerland**



Central EU and Switzerland (56)
Southern EU (48)
Eastern EU (29)
Northern EU (7)

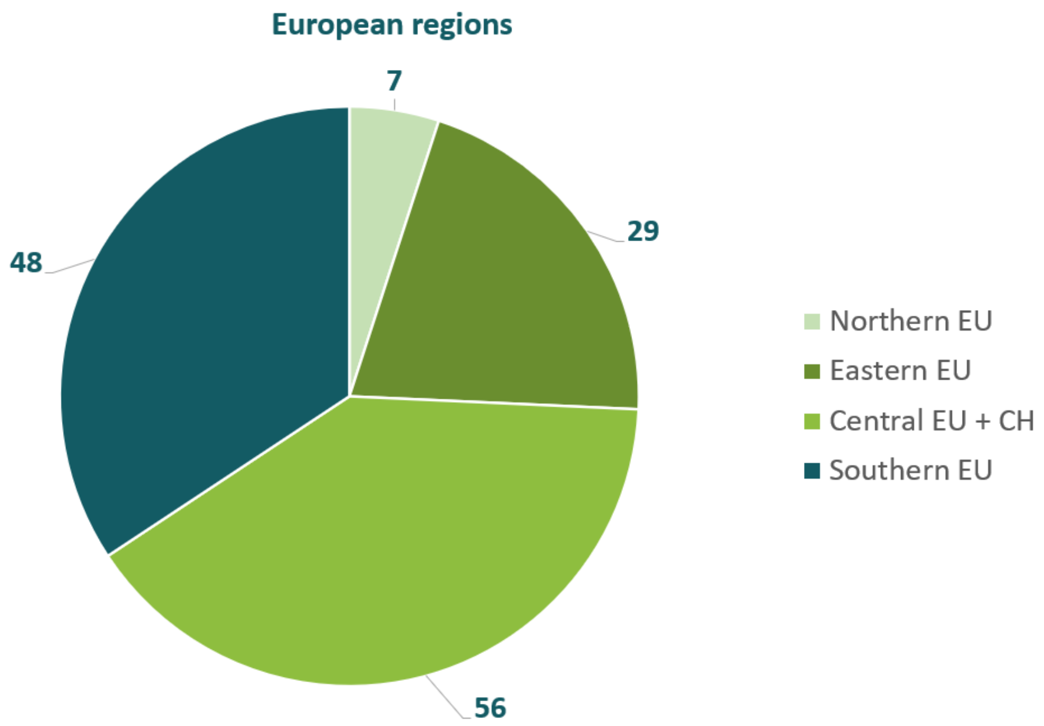
general profiling questions

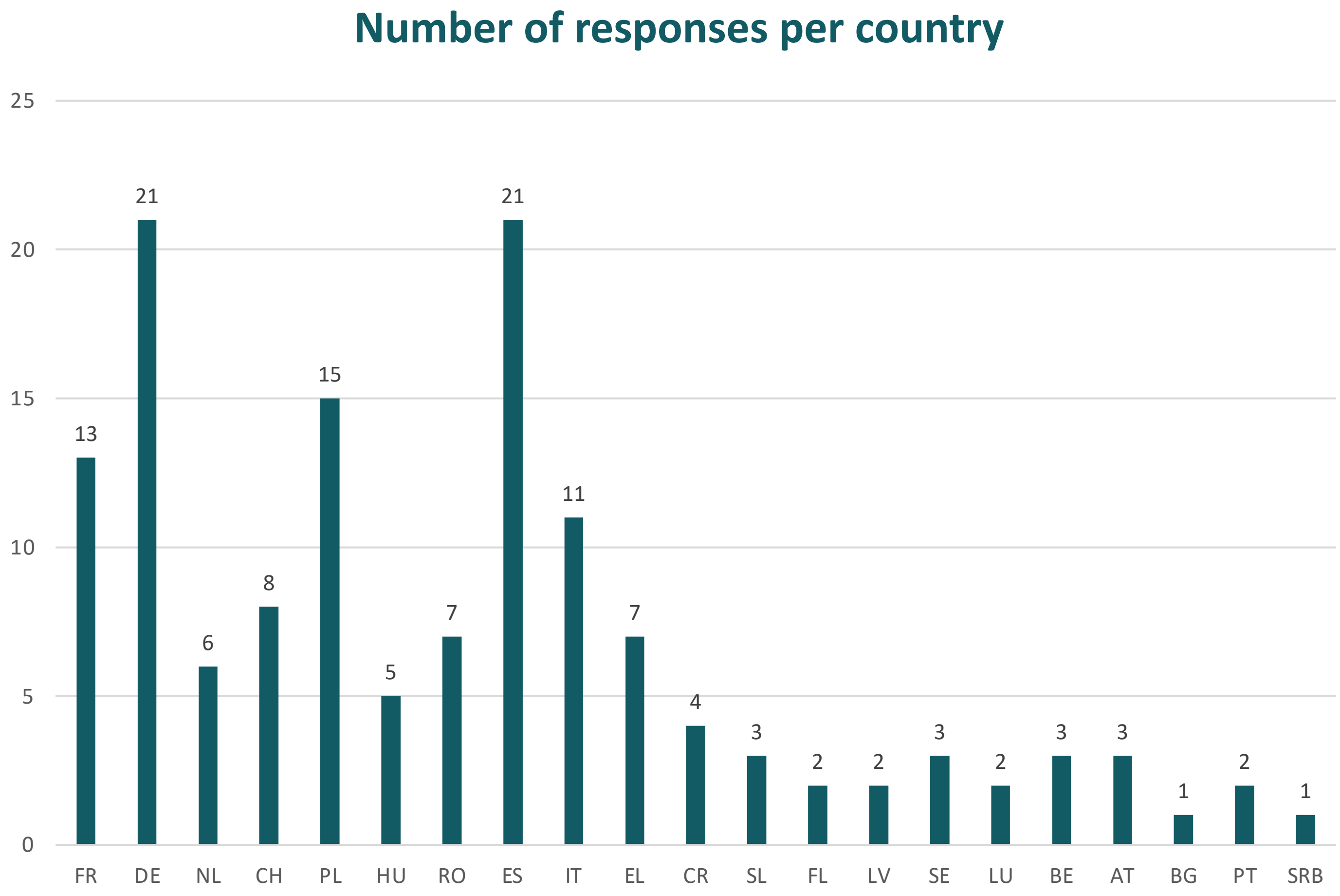
economic, technical, regulatory and encouragement segment of organic seed production

Key stakeholders of the survey:

- **organic seed producers/traders**
- **conventional seed producers/traders**

Number of respondents per country and per EU regions





*low response rate from some countries (CR, SL, FL, LV, SE, LU, BE, AT, BG, PT, SRB) – not representative

Main outcomes of the survey

Type of seeds

- 91 (**65%**) respondents working with organic seeds
- 50 (**36%**) respondents working with conventional untreated seeds
- 57 (**41%**) respondents working with conventional treated seeds

Type of seeds

- organic seeds is mostly produced in **France** and the **Netherlands** (100 %), followed by **Germany** (76%), **Switzerland** (75%) and **Spain** (71%)
- in some countries production of organic seeds is very low (**Greece, Poland**), or isn't indicated at all (**Romania**)
- in Italy, Hungary, Croatia and Sweden, more than 50% of the respondents also indicated production of organic seeds
- all respondents from Latvia, Finland, Luxembourg, Belgium, Portugal and Serbia also indicated production of organic seeds

Crop groups

- mostly represented crop groups are arable crops (88) and grain/legumes (69)
- 52 (37%) respondents working with vegetables and 57 (41%) with forage/grasses
- some respondents indicated also oil plants, fruit and other crop groups

- Arable crops → Hungary, Italy, Germany, Switzerland, Poland, Greece
- Grain/legumes → Switzerland, Germany, Greece
- Vegetables → Switzerland, Spain
- Forage/grasses → Romania, Greece

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Type of business

- most of the respondents are active in **seed multiplication** (86%)
- 46% of the respondents are active in **breeding**
- 55% of the respondents active in **selling seed to farmers and companies**
- 41% of respondents active in **conserving local and traditional cultivars**

Farming method

- 64% of the respondents operate with **organic seed from conventionally bred cultivars**
- 44% of the respondents operate with **organic seed from organically bred cultivars**
- 34% of the respondents operate with **organic seed from local and traditional cultivars**

FARMING METHOD

Organic seed from conventionally bred cultivars
→
Netherlands, Spain, Italy and **Germany**

Organic seed from organically bred cultivars
→
France, Switzerland and **Germany**

Organic seed from local and traditional cultivars
→
Spain, Switzerland and **France**

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Turnover from seeds (organic + conventional)

SMALL SIZED	MEDIUM SIZED	LARGE SIZED
0 – 1 000 000 EUR/year **56% of the respondents**	1 000 000 – 50 000 000 EUR/year **33% of the respondents**	> 50 000 000 EUR/year **11% of the respondents**

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Planned investments in organic seed production in next 3-5 years

INCREASE INVESTMENTS & EFFORTS

40,7% of the respondents

DECREASE INVESTMENTS & EFFORTS

2,9% of the respondents

REMAIN CLOSE TO CONSTANT

35,7% of the respondents

NO INVESTMENTS PLANNED

20,7% of the respondents

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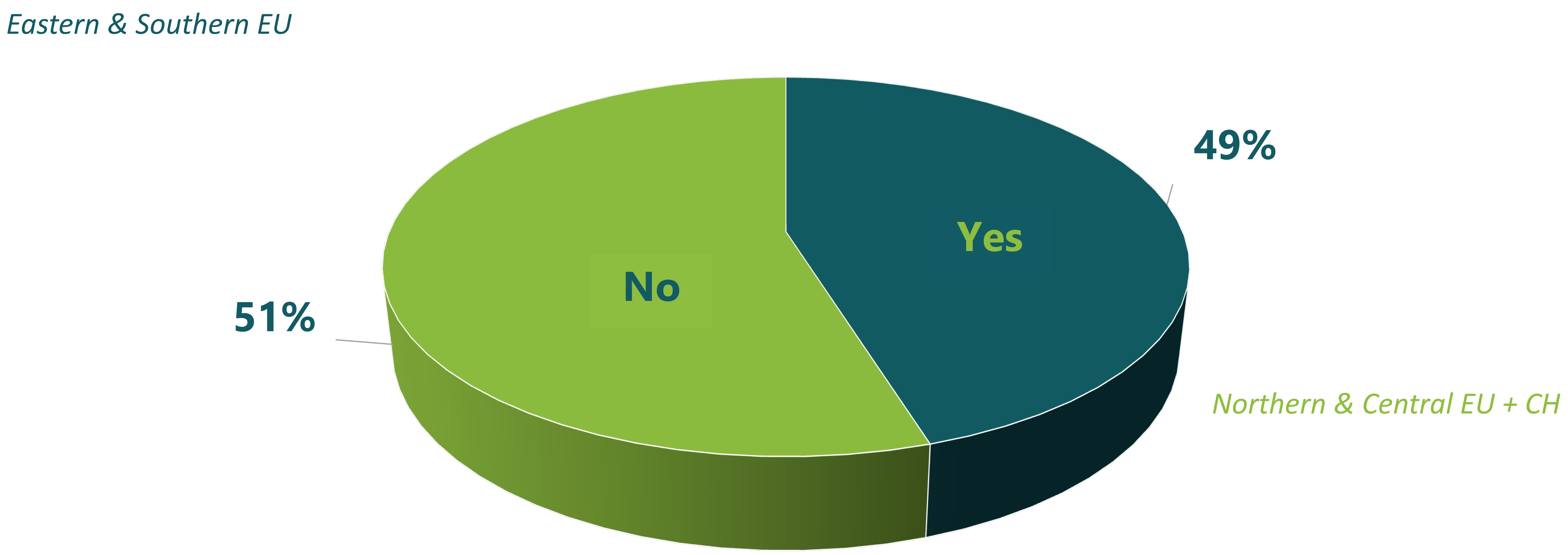
Seeds offer in national organic seed databases



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Economic challenges in organic seed production

Economic challenges in organic seed production

Respondents were asked to indicate which are the most often economic challenges that organic seed producers/breeders face in terms of:

- OPEX
- CAPEX
- certification cost
- marketing cost
- low return on investment
- education on financing models
- changes of legal framework
- legal requirements
- national and EU legal framework discrepancies

Economic challenges in organic seed production

OPEX - operating expenditure (e.g. labour cost, marketing channels, input costs, etc.)

CAPEX - capital expenditure (e.g. organic certified cleaning/packaging facilities, seed processing infrastructure, equipment, etc.)

most of the respondents agree that organic seed production is economically more challenging in comaparison to conventional seed production in terms of OPEX and CAPEX!

→ **Northern EU countries are exception**

low return on investment of dedicated organic breeding programs, frequent changes of legal framework and difficulties to fulfil the legal requirements are also considered a big challenge, especially in countries with low organic seed production (PL, RO, EL)

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Technical challenges in organic seed production

Technical challenges in organic seed production

Respondents were asked to indicate which are the most often technical challenges that organic seed producers/breeders face considering:

- **yield loss/volatility**
- **seed borne pests and diseases**
- **weed contamination**
- **farmers willing to multiply the seed**
- **GMO contamination**

Technical challenges in organic seed production

- almost all respondents agree that organic seed production is technically more challenging in comparison to conventional seed production in terms of **yield losses/volatility, seed borne pests and diseases and weed contamination**

- **GMO contamination** is not considered as an issue in organic seed production

- most of the respondents also consider that organic seed production is technically more challenging in terms of finding **farmers willing to multiply the seed**

Regulatory segments for better development of organic seed production

Regulatory segments that can support better development of organic seed production

Most important regulatory segments for better support of the sector development, as detected in the sruvey, include:

- **phasing out the derogations**
- **(governmental) subsidies**
- **establishing interaction between policymakers and organic seed producers**
- **less demanding legal framework for SME**
- **less demanding legal framework for OHM, Organic varieties, local, traditional cultivars and cultivars coming from participatory and farmers' plant breeding**

Regulatory segments that can support better development of organic seed production

Countries with high organic seed production

- **phasing out the derogations**
- **(governmental) subsidies**
- **interaction with policymakers**

Countries with low organic seed production

- **(governmental) subsidies**
- **providing training offers on organic seed production**
- **providing information on organic seed market demand of EU and non-EU markets**

In some Southern EU countries (CR, IT, SL) and Northern EU countries → **training offers** on organic seed production & **larger range of organically allowed seed treatments** are also considered important factor for better sector development

Encouragement by the government and national authorities

Encouragement by the government and national authorities

subsidies related to OPEX

education and trainings

simplification of the administration burden

subsidies related to CAPEX

research projects

set up of seed producers' associations

involvement of other governance levels

development of marketing strategies

raising awareness campaigns

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Encouragement by the government and national authorities

Most important encouragement segments for better support of organic seed production, as detected in the survey, include:

- **subsidies related to OPEX and CAPEX**
- **simplification of the administration burden**
- **organic breeding and seed production research projects**
- **developing national roadmap for 100% organic seed including national lists of crops without derogation**
- **raising awareness campaigns about the importance of organic seeds**

Encouragement by the government and national authorities

Countries with high organic seed production

- timely update and connection of national database to EU wider router database
- developing national roadmap for 100% organic seed
- simplification of the administration burden
- research projects
- raising awareness campaigns

Countries with low organic seed production

- subsidies related to CAPEX
- education and trainings on organic seed production
- development of marketing strategies
- organic breeding and seed production research projects
- timely update and connection of national database to EU wider router database
- developing national roadmap for 100% organic seed
- organization of field demo days to showcase good practices

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