

# Mapping women in agriculture and rural areas: descriptive statistics from Horizon-funded projects

**The views expressed are purely those of the author and may not in any circumstances be regarded as stating an official position of the European Commission.**

*Marie Lalanne, Joint Research Centre, RSA Porto 2025*

# Horizon-funded projects

- ▶ Contribution to the special session entitled "Exploring Gender Equality in Policy Regional and Rural Perspectives" organised by the GRASS CEILING Horizon Europe project
- ▶ Horizon programmes are the EU's key funding programmes for research and innovation:
  - ▶ Horizon 2020 is the programme for 2014-2020 with a budget of nearly €80 billion
  - ▶ Horizon Europe is the programme for 2021-2027 with a budget of €93.5 billion

# Methodology

- ▶ Text mining approach to select projects on Women in Agriculture and Rural Areas (WARA) projects
- ▶ List of keywords:
  1. gender, gender equality, women, rural women, women in agriculture, women-led innovation, woman farmers, innovative women
  2. rural, agricultural, innovation systems, regional policy, rural perspective, rural economy, rural communities, agriculture, local development, biocultural memories
- ▶ Searched in title, abstract, free keywords

# Example: GRASS Ceiling project

- ▶ Title: Gender Equality in Rural and Agricultural Innovation Systems
- ▶ Abstract: "GRASS Ceiling will develop a context where women can drive socio-ecological transitions, that is, develop innovations in response to socio-ecological challenges and strengthen the resilience of rural areas. This is essential to deliver the UN's goals on gender parity, realise the EU gender equality strategy, and achieve the goals of the Green Deal, the Farm to Fork strategy, the Long-Term Vision for Rural Areas and the European Pillar of Social Rights. [...]"
- ▶ Free Keywords: women socio-ecological innovators; inclusive policies; positive change

# Descriptive Statistics

**Table:** Descriptive statistics by Framework Programme

|                | All     |        | Horizon 2020 |        | Horizon Europe |        |
|----------------|---------|--------|--------------|--------|----------------|--------|
| WARA projects  | 490     | 0.23%  | 200          | 0.15%  | 290            | 0.35%  |
| W projects     | 7,956   | 3.66%  | 4,221        | 3.15%  | 3,735          | 4.47%  |
| ARA projects   | 15,603  | 7.17%  | 8,383        | 6.25%  | 7,220          | 8.65%  |
| Other projects | 217,143 | 99.77% | 133,948      | 99.85% | 83,195         | 99.65% |
| Total          | 217,633 | 100%   | 134,148      | 100%   | 83,485         | 100%   |

WARA: Women in Agriculture and Rural Areas

Source: eCORDA (COmmon Research DATA Warehouse)

# Descriptive Statistics

**Table:** Descriptive statistics - WARA projects vs others

|                                      | WARA projects |           | Other projects |            | Diff.             | Std. Err.     |
|--------------------------------------|---------------|-----------|----------------|------------|-------------------|---------------|
|                                      | Mean          | Std.Dev.  | Mean           | Std.Dev.   |                   |               |
| Duration (months)                    | 42            | 13        | 44             | 15         | 1.591*            | 0.674         |
| Total Cost (euros)                   | 4,087,064     | 2,626,369 | 16,754,250     | 68,659,653 | 12,667,186.205*** | 3,101,739.182 |
| EU Contribution (euros)              | 3,981,566     | 2,540,282 | 11,709,082     | 47,055,019 | 7,727,515.866***  | 2,125,740.941 |
| Nb of participants                   | 14            | 7         | 35             | 127        | 20.485***         | 5.728         |
| Secondary and Higher Education (HES) | 202           | 41.22%    | 61,600         | 28.37%     |                   |               |
| Private For-Profit Companies (PRC)   | 98            | 20.00%    | 71,284         | 32.83%     |                   |               |
| Research Organisations (REC)         | 94            | 19.18%    | 49,502         | 22.80%     |                   |               |
| Public Bodies (PUB)                  | 11            | 2.24%     | 11,311         | 5.21%      |                   |               |

Statistical significance levels: +  $p < 0.10$  \*  $p < 0.05$  \*\*  $p < 0.01$  \*\*\*  $p < 0.001$

Source: eCORDA (Common Research Data Warehouse)

# Descriptive Statistics by Region

- ▶ On average, 2 WARA projects per NUTS 2 region
- ▶ Half of regions without any WARA project
- ▶ "Top performers":
  - ▶ Valencia (ES52): 27
  - ▶ Brussels (BE10): 24
  - ▶ Ile-de-France (FR10): 19
  - ▶ Catalonia (ES51): 17
  - ▶ Lazio (IT14): 16

# Maps

## Number of WARA projects

by NUTS2 regions (2021) for H2020 and HE

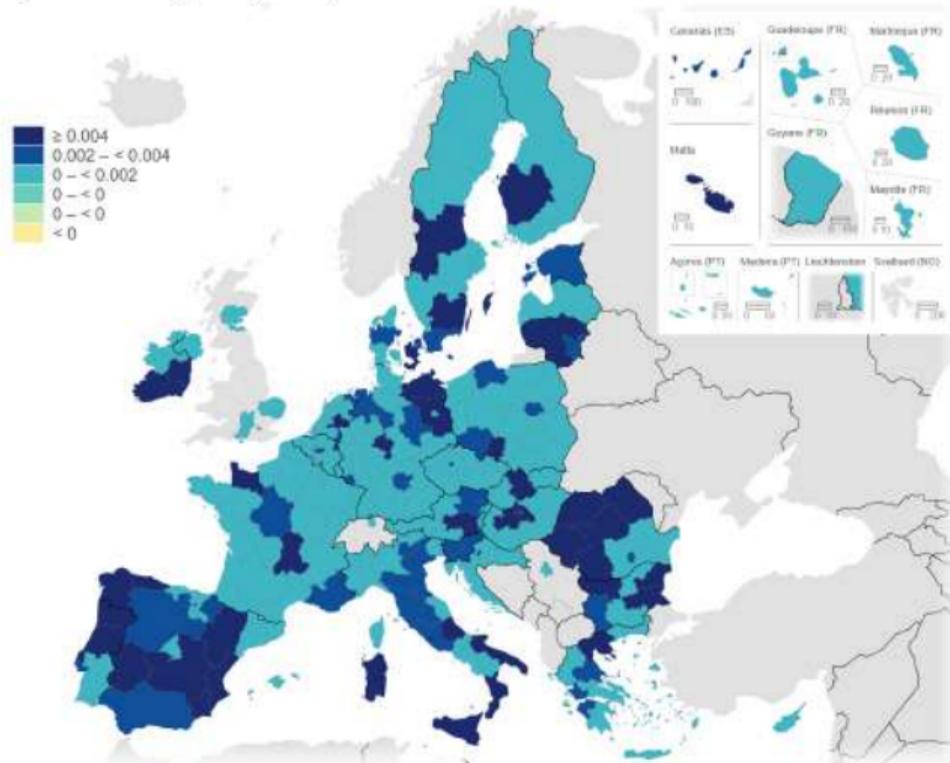


# Descriptive Statistics by Region

- ▶ On average, 0.003% of WARA projects per NUTS 2 region
- ▶ "Top performer" has a percentage of 0.054% of WARA projects (Southern Sweden (SE21))
- ▶ Other "top performing" regions:
  - ▶ Bulgarian regions (BG31, BG33, BG34)
  - ▶ German region (DE73)
  - ▶ Spanish regions (ES12, ES52, ES62)
  - ▶ Hungarian regions (HU12, HU21)
  - ▶ Italian region (ITF6)
  - ▶ Polish region (PL52)
  - ▶ Romanian regions (RO11, RO41)

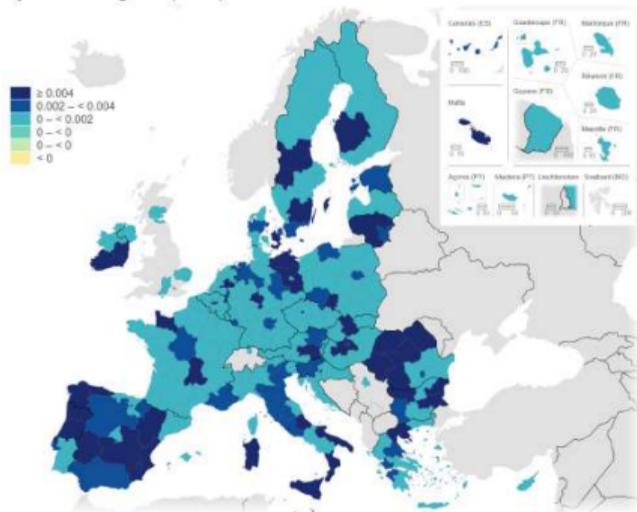
# Maps

## Percentage of WARA projects by NUTS2 regions (2021) for H2020 and HE



# Maps

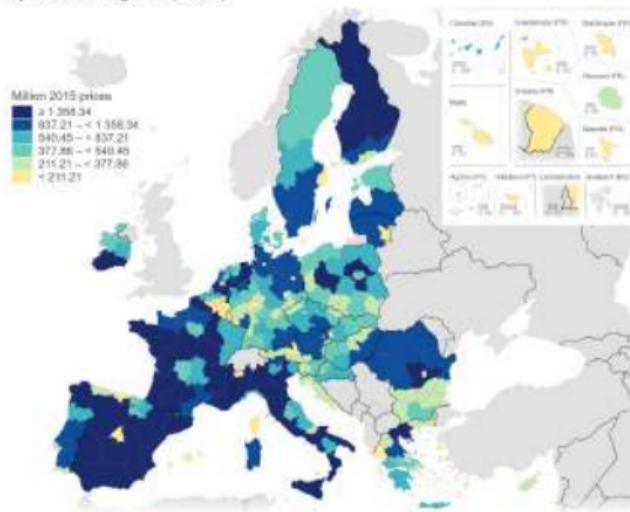
**Percentage of WARA projects**  
by NUTS2 regions (2021) for H2020 and HE



Source: eCORDA (Common Research Data Warehouse)

Administrative boundaries: © EuroGeographics © UN-FAO © Turkish Cartography, Eurostat - IMAGE, 04/2025

**Average GVA of Agriculture/Forestry/Fishing sector**  
by NUTS2 regions (2021)

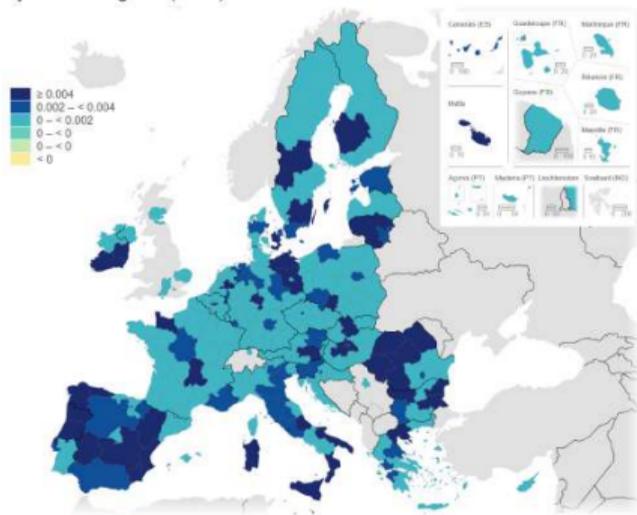


Source: AMBERD

Administrative boundaries: © EuroGeographics © UN-FAO © Turkish Cartography, Eurostat - IMAGE, 04/2025

# Maps

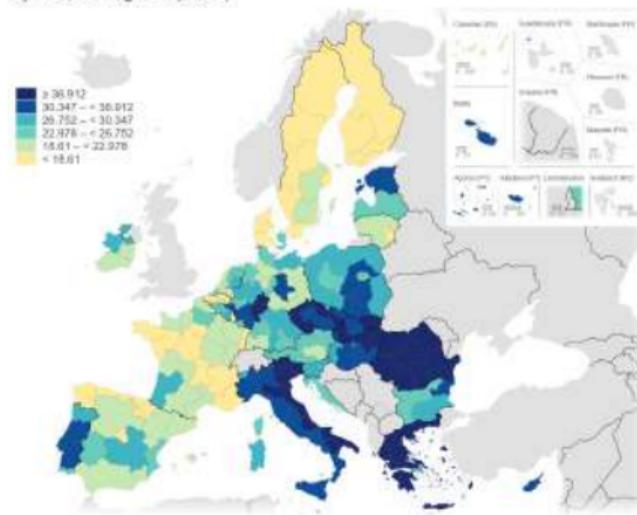
**Percentage of WARA projects**  
by NUTS2 regions (2021) for H2020 and HE



Source: eCORDIS (Common Research Data Warehouse)

Administrative boundaries: © EuroGeographics © UN-FAO © Turkish Cartography, Eurostat - IMAGE, 04/2025

**Female Disadvantage Index**  
by NUTS2 regions (2021)



Source: Regional Gender Equality Monitor

Administrative boundaries: © EuroGeographics © UN-FAO © Turkish Cartography, Eurostat - IMAGE, 04/2025

# Conclusion

- ▶ Low percentage of WARA projects out of all Horizon projects BUT percentage is rising
- ▶ In general: smaller projects, mainly lead by universities
- ▶ Correlation with regional importance of agricultural sector
- ▶ Less well correlated with an index of female disadvantage

# Keep in touch



EU Science Hub: [ec.europa.eu/jrc](https://ec.europa.eu/jrc)



@EU\_ScienceHub



EU Science Hub – Joint Research Centre



EU Science, Research and Innovation



Eu Science Hub

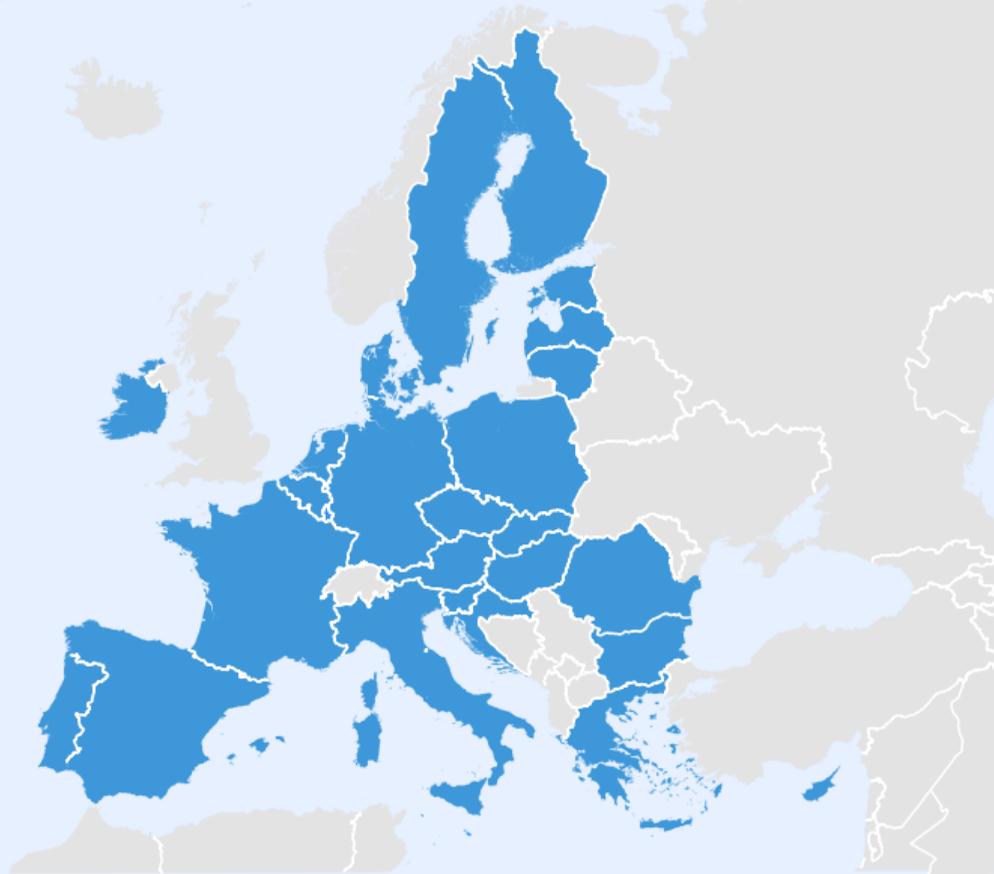
# Thank you



©European Union 2020

Unless otherwise noted the reuse of this presentation is authorised under the CC BY 4.0 license. For any use or reproduction of elements that are not owned by the EU, permission may need to be sought directly from the respective right holders.

# EU countries

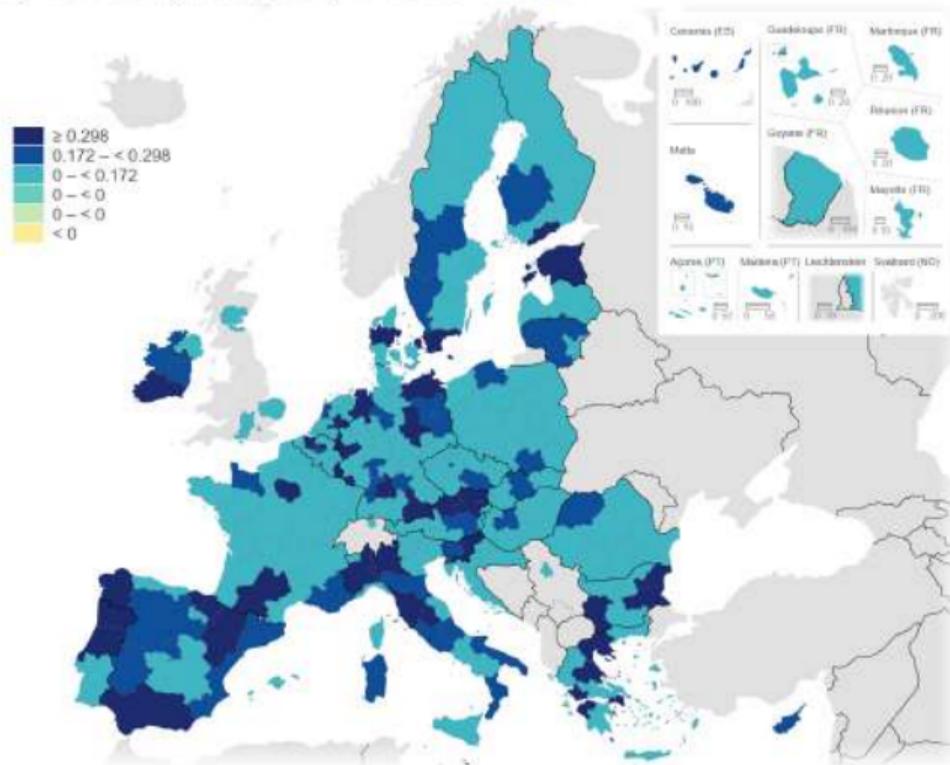


0 250 500 1,000 Km

© European Union, 2016. Map produced by EC-JRC. The boundaries and the names shown on this map do not imply official endorsement or acceptance by the European Union.

# Maps

## Percentage of WARA projects' total cost by NUTS2 regions (2021) for H2020 and HE



## Regional Gender Equality Monitor 2021

| 1. Work and Money  | 2. Knowledge   | 3. Time                                     | 4. Power                                     |
|--|--|---|--|
| Full-time and part-time employment rate                      | Graduates of tertiary education                                  | Regularly participate in a leisure activity | Share of ministers in national governments   |
| Unemployment rate  | Formal or non-formal education and training                      | Donated money to a charity                  | Share of members in national parliaments     |
| Employed with tertiary education                             | Early leavers from education and training*                       | Helped a stranger who needed help           | Share of members in regional assemblies      |
| Mean monthly earnings  | Young people neither in employment nor in education and training | Volunteered time to an organisation         | Share of members of regional executives      |
|  |  |   | Share of members of local/municipal councils |
| 5. Health  | 6. Safety, Security and Trust                                    | 7. Quality of Life                          |  |
| Self-perceived good or very good health                      | Safety at night  | Feel well-rested                            |  |
| Health problem that prevents from living a normal life       | Relatives and friends count on for help                          | Smile or laugh a lot                        |  |
| Life expectancy in absolute value at birth*                  | Women treated with respect and dignity                           | Experience enjoyment                        |  |
| Malignant neoplastic and cardiovascular diseases death rate* | Voiced your opinion to a public official                         | Life satisfaction                           |  |
| No unmet medical needs                                       |  | Opportunities to make friends               |  |
| No unmet dental needs  |  | Satisfied with the freedom                  |  |

33 indicators in Female Achievement Index  
30 indicators in Female Disadvantage Index  
(missing in FemDI are indicated with \*)

Maximum number of indicators by domain 6 in Health and Quality of Life

Minimum number of indicators by domain 4 in Work and Money, Knowledge, Time and Safety, Security and Trust