

Gender Inequality in Rural and Urban Areas Across Europe

Elsa Fontainha# and Tanya Vianna de Araújo*#*



Lisbon School
of Economics
& Management
Universidade de Lisboa

* ISEG RESEARCH, Universidade de Lisboa

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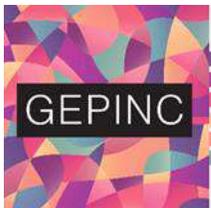
Gender Equality Plans for INclusivity: engines of Change

Regional Studies Association (RSA) Annual Conference 2025

SS13: Exploring Gender Equality in Policy: Regional and Rural Perspectives

Organizer: Blanca Casares Guillén – AEIDL (European Association for Innovation in Local Development)

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Research Goals

- Compare gender **inequalities between rural and urban areas** in Europe using data from the 2023/2024 European Social Survey(ESS); module Gender in Contemporary Europe.
 - The study applies Network Analysis to reveal spatial patterns in gender inequality across European country/regions.
- Explore the **potential for developing a regional index** by adapting the methodology and data sources of the European Institute for Gender Equality (EIGE) Gender Equality Index
- Opinions about equality...

Literature

Investigating gender equality at the sub-national level is essential for:

- Identifying **granular disparities** hidden by aggregated national data
(Di Bella et al. 2021; Di Bella & Culotta 2023; Fachelli & López-Roldán 2023; Cascella et al. 2022).
- Formulating, monitoring and evaluation of **local context-specific policy** interventions
(Di Bella & Culotta 2023; Fachelli & López-Roldán 2023)
- Addressing **geographically differentiated barriers** to gender equality
(Acosta et al. 2021)
- Facilitating the agency and capacity building of **sub-national stakeholders**
(Singh 2024)
- Contributing to enhanced **regional and national development** outcomes

Gender Inequality in Rural Areas I Europe 2023 (unit: %)

	Rural areas	Average (all degrees of urbanisation)	Rural areas	Average (all degrees of urbanisation)
People with a disability (activity limitation; ≥ 16 years)	21.8	21.3	18.8	17.8
People having a long-standing illness or health problem (≥ 16 years)	38.0	37.2	34.4	32.8
People at risk of poverty or social exclusion (≥ 16 years)	22.5	20.3	20.4	22.4
Tertiary educational attainment (aged 25–34 years)	38.4	48.8	25.3	37.6

In Rural Areas, women compared with men have:

- + disability
- + illness or health problems
- + risk of poverty or social exclusion

+ tertiary education attainment



Gender Inequality in Rural Areas II

Labour Market, Europe 2023 (unit: %)

	Rural areas	Average (all degrees of urbanisation)	Rural areas	Average (all degrees of urbanisation)
Employment rate (20–64 years)	69.7	70.2	81.0	80.4
Part-time employment (20–64 years)	26.5	27.9	6.0	7.7
Fixed-term employees (20–64 years)	12.0	13.2	9.9	11.3
Youth unemployment rate (15–24 years)	13.8	14.0	13.1	14.9
Unemployment rate (15–74 years)	5.7	6.4	5.0	5.8

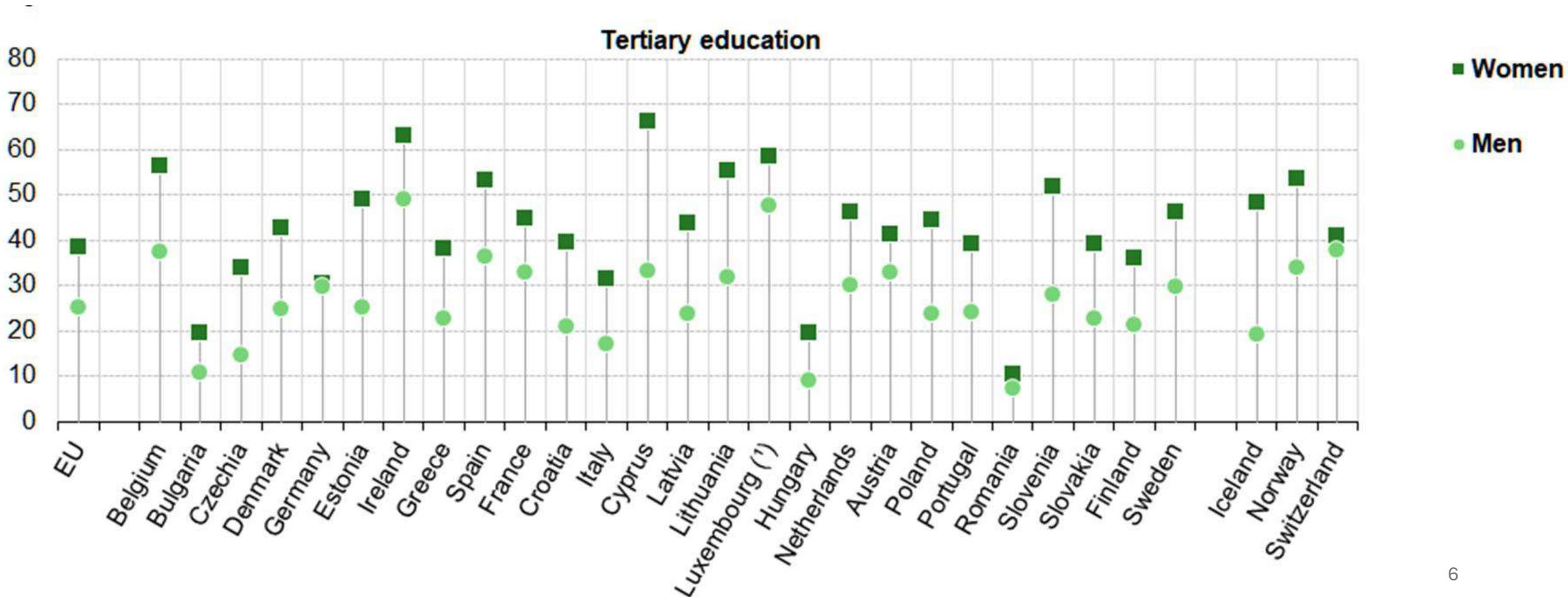
In Rural Areas, women compared with men are:

- + unemployment
- + youth unemployment
- + fixed-term employees



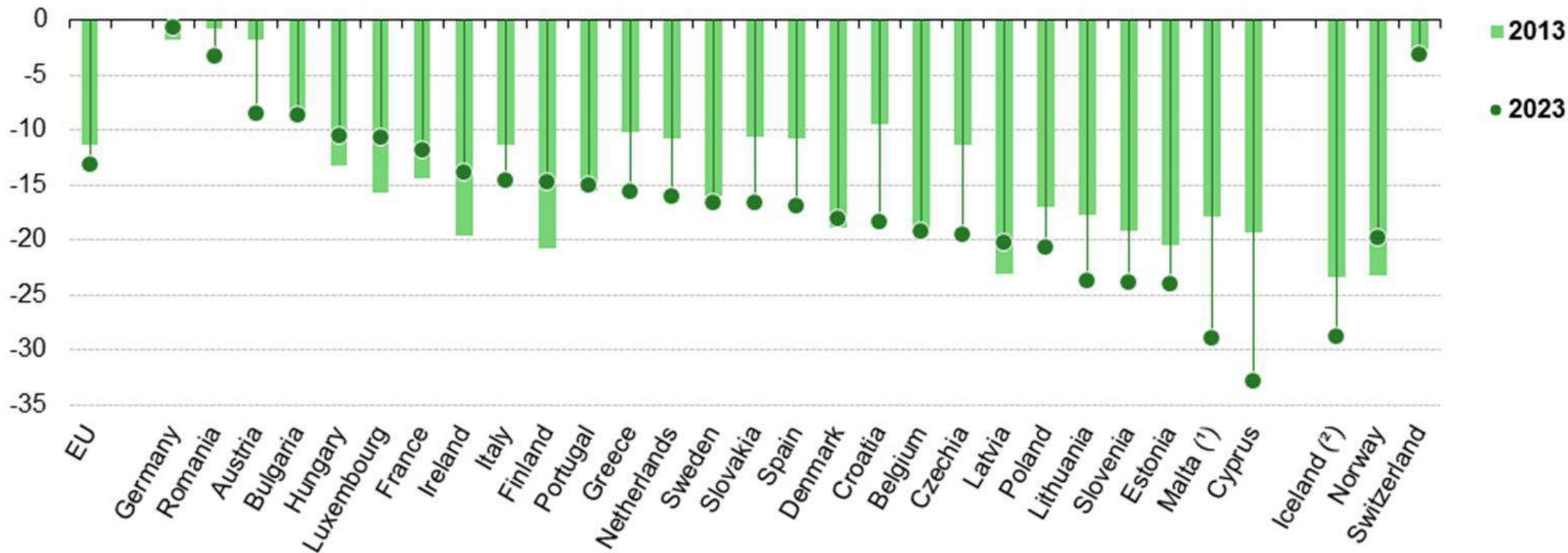
Educational Attainment (24-34 yrs) in Rural Areas by Gender and Country, 2023

In **all countries** women have a higher level of tertiary education



Gender Gap for Tertiary Education Attainment (25-34 yrs) in Rural Areas, By Country (2013;2023)

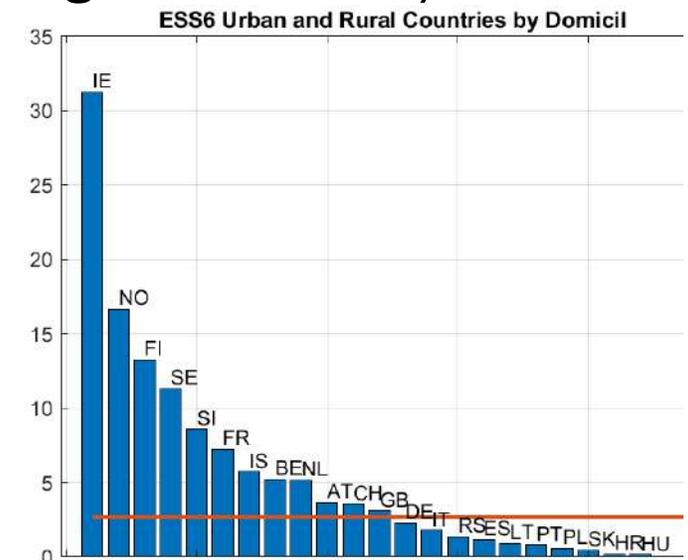
....and in most of the countries **the gap is growing...**



Note: the gender gap is measured as the share of men (aged 25–34 years) with a tertiary educational attainment minus the corresponding share among women. Break in series.

Networks Data Source and Methodology I

- Source: ESS Round 11 2023/2024 (microdata; unit:ind)
- Sample: Total 40,156 obs; 24 countries
- Original variables
 - Gender
 - Local of residence: 5 categories are considered one is rural/farm (Rural 2,030)
 - Education Level (years of schooling, avoid different categories ISCED)
- Ratio =Rural/Total Population
- Threshold= median -> 2 groups of countries
 - + rural
 - rural

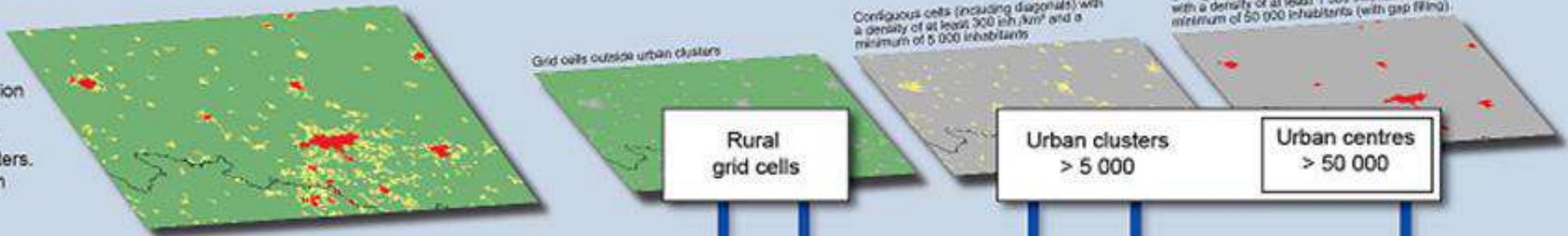


3 Urban-Rural Typologies Grid; LAU; NUTS III

Geographical level		Basic territorial typologies
Regional typologies:	NUTS 1 regions	Urban-rural typology (*): predominantly urban regions; intermediate regions; predominantly rural regions
	NUTS 2 regions	
	NUTS 3 regions	
Local typologies:	Local administrative units (LAU)	Degree of urbanisation (**): cities; towns and suburbs; rural areas

Grid cells

A classification of raster cells of 1 km² using criteria of population density and contiguity. Where available, the population distribution is derived from registers. Elsewhere, it is downscaled from local (LAU) population figures.



LAU

Degree of urbanisation

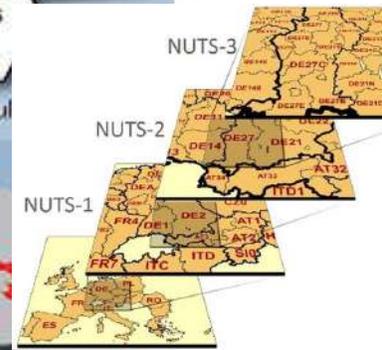
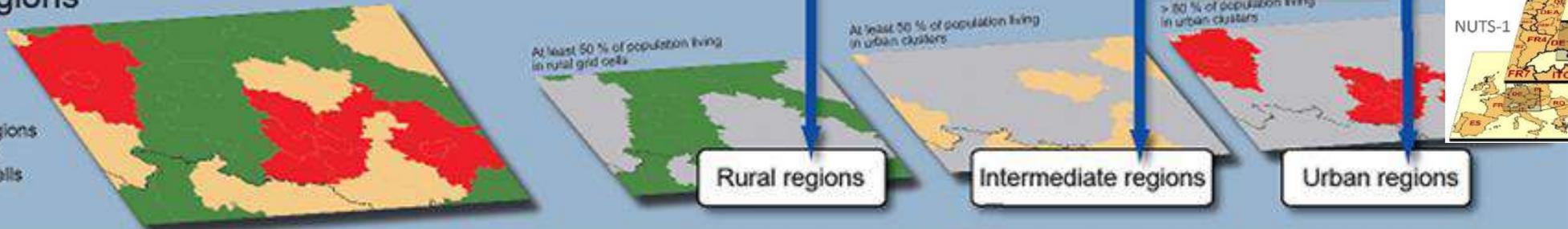
A classification of local administrative units (LAU) based on the share of local population living in urban clusters and in urban centres.



NUTS level 3 regions

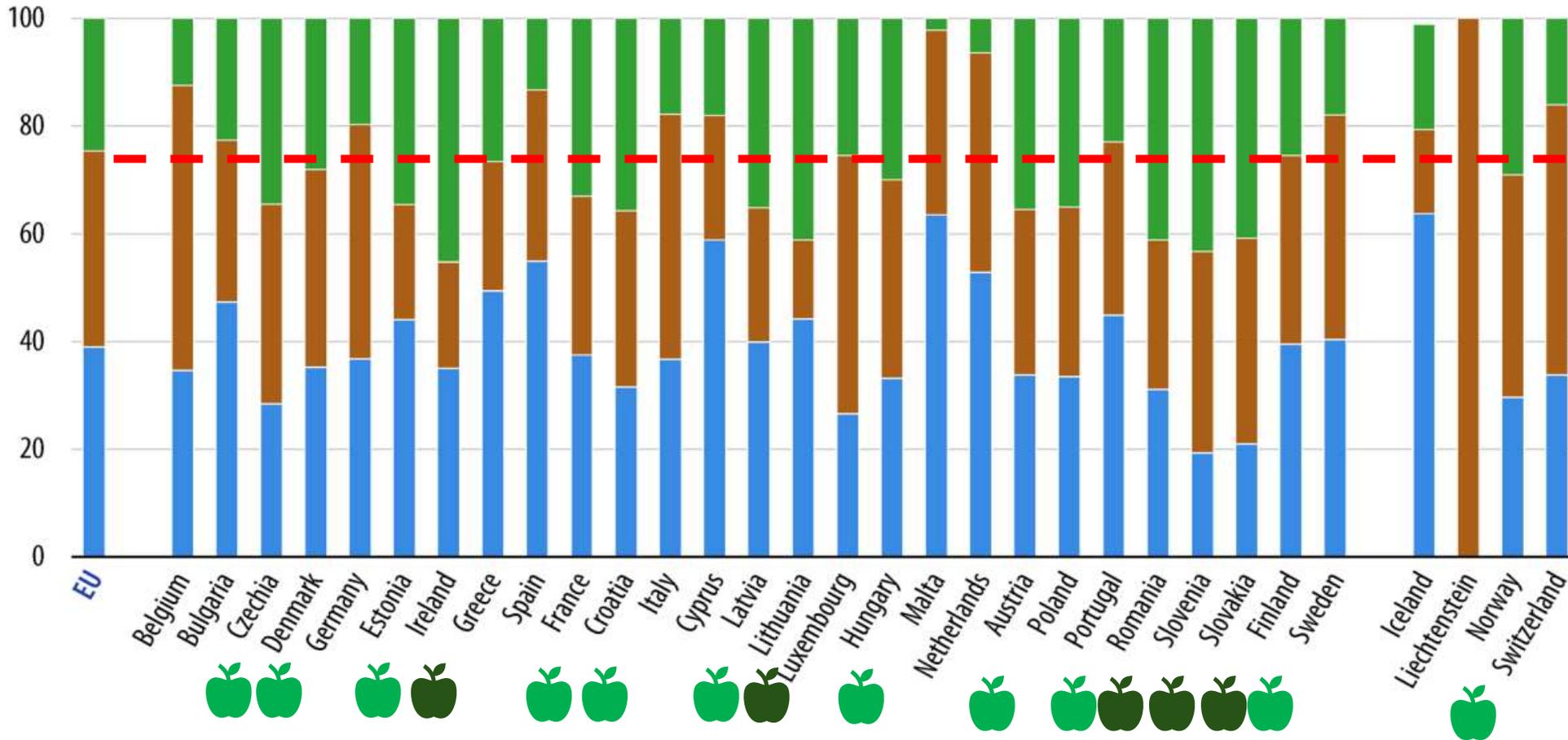
Urban/rural typology

A typology of NUTS level 3 regions based on the share of regional population living in rural grid cells and in urban clusters.



Degree of Urbanization (%) in Europe 2021

Distribution of Population: Rural Areas



(% share of total population, 2021)

Note: Iceland, 2018.

Source: Eurostat (GISCO), based on census population grid 2021 and local administrative units 2021



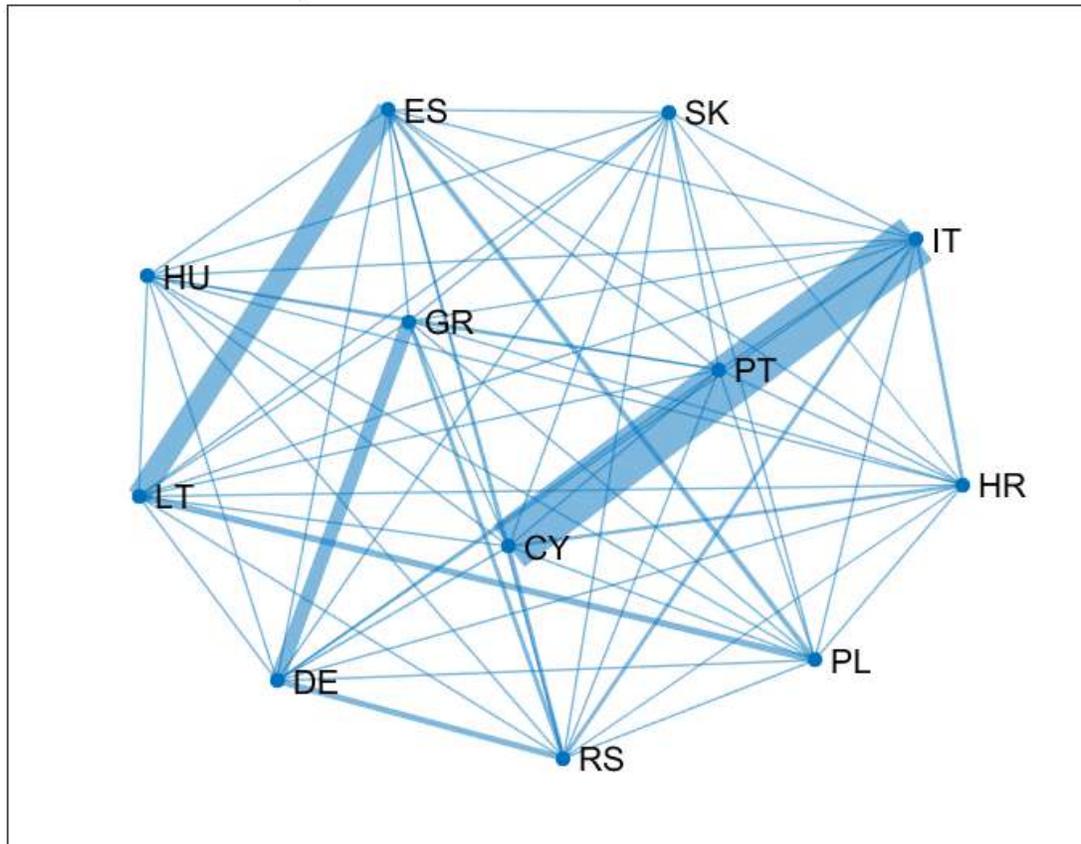
Networks Methodology

- Countries are the nodes in each network
- Each country is characterized by one specific attribute (e.g. F/M years of education)
- For each pair of countries the absolute value of the difference between the ratio Female/Male of years of education is computed. This is the *distance* metric.
- The inverse value of the *distance* is the *intensity* of the link . The more distant the ratio F/M of years of education between 2 countries, the lower the *intensity* of the connection between them.
- 4 networks are built: 2 for rural (complete + filtered) and 2 for 'urban' (complete + filtered)
 - complete (all nodes are connected)
 - filtered, if only links > median(all-links) are kept

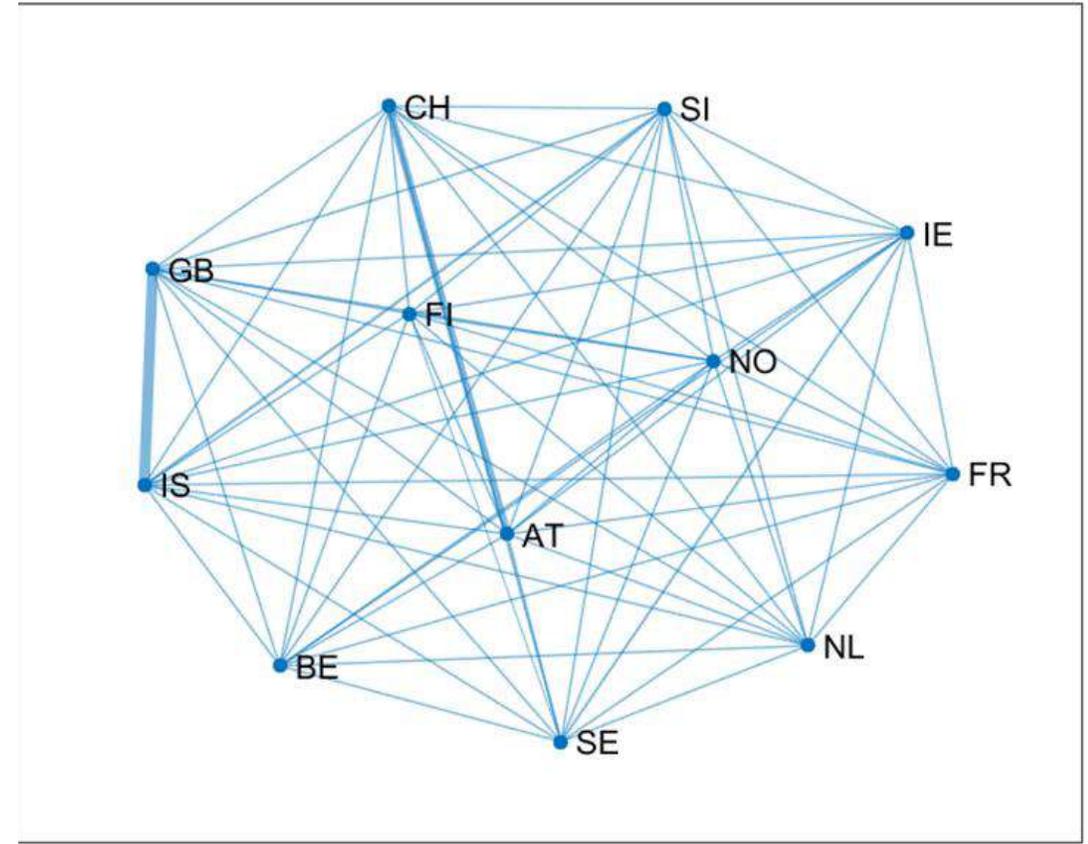
Results

Complete Networks (+ rural ; 'urban')

ESS8₁r Network by Eduyrs.Links * Rural



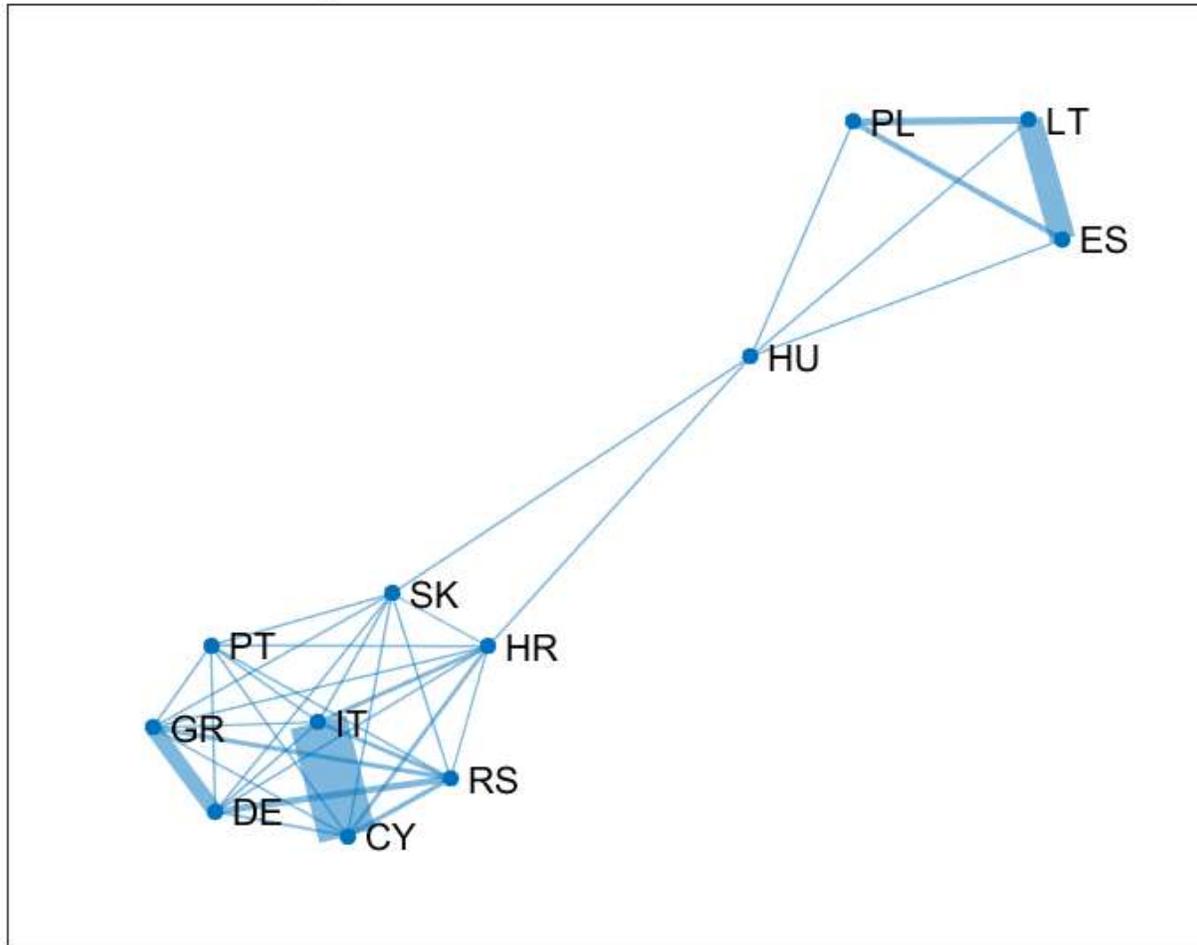
ESS8₁ Network by Gendered Eduyrs.Links * Urban



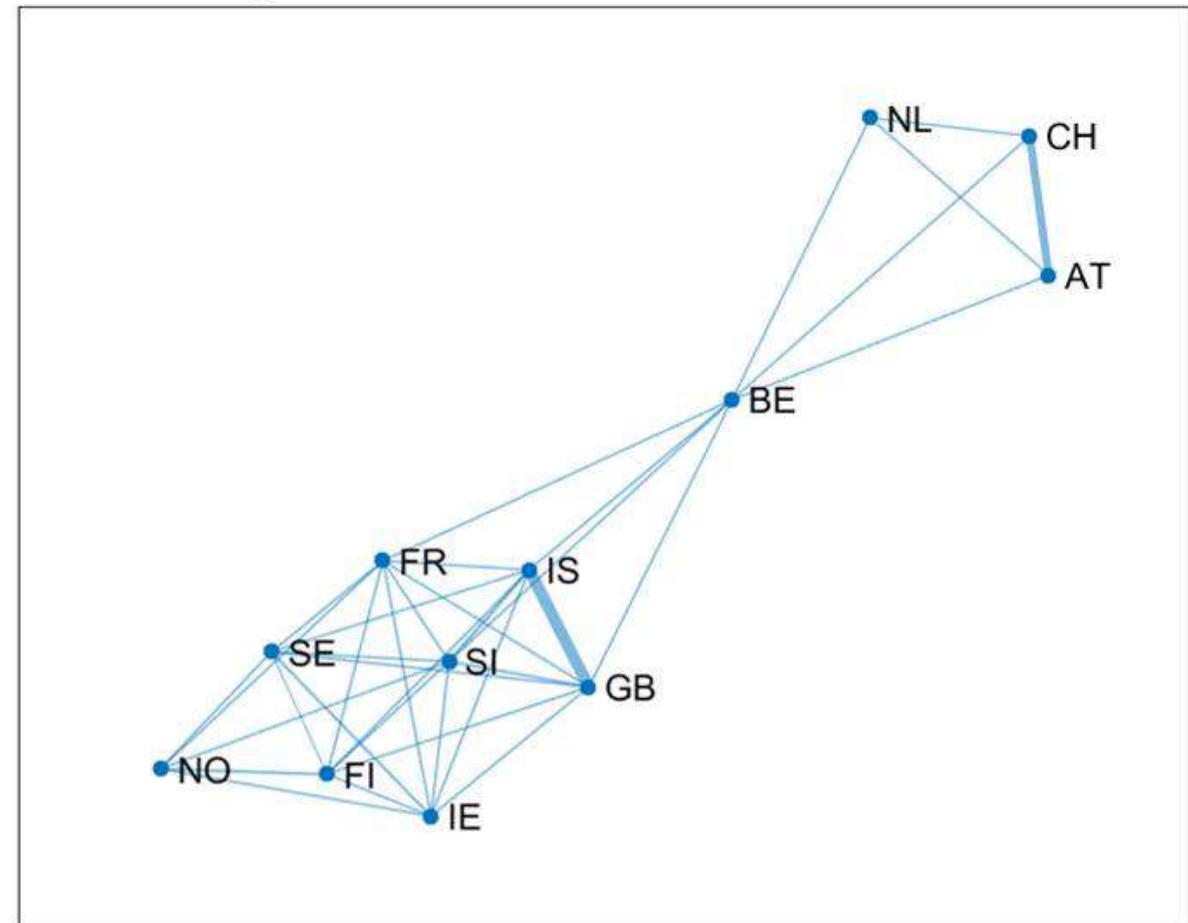
Results

Filtered Networks (+ rural ; 'urban')

ESS8₂r Network by Eduyrs.Links * Rural



ESS8₂ Network Gendered Eduyrs.Links * Urban



Results

Filtered Networks (+ rural ; 'urban')

Both Complete and Filtered Networks show:

Link intensity (line width) in the networks of the group of Rural countries is more heterogeneous than for the group of 'Urban' countries.

Regional Gender Equality Indices

Gender Equality Index (European Institute for Gender Equality EIGE) by Domains UE e Portugal (2019)

Work (W) Finance(F) Knowledge (K), Time (T), Power (P), Health (H)



Regional Gender Equality Indices

examples

Characteristics	<i>R-GEI</i> Di Bella, et al. (2021)	<i>eRGGI</i> Casella et al. (2022)	<i>US-GEI</i> Di Noia (2002)	Statistics Norway (2022) *
Main Domains	Work (7 indicators) Finance (6 indicators) Knowledge (5 indicators) Time (6 indicators) Power (11 indicators) Health (10 indicators)	Economic Participation and Opportunities Education Level Health and Survival Political Power	Economy Policy Laws	Infrastructures that enhance equality (1) Sectoral economic structure and education profiles (4) Distribution of work/care time (3) Distribution of resources and influence (2) Distribution of political influence (1) Distribution of financial resources (1)
Variables Indicator	24 original or adapted GEI indicators (10 with the same source as the GEI; 14 adapted to the regional level). 7 indicators contained in the GEI are not included due to lack of regional information	14 indicators	43 indicators	12 indicators (20 variables)
Country Regions	Italy 20 Regions NUT II ** 5 Regions NUTS I	Italy 22 regions NUTS II 5 regions NUTS I	USA 50 States	Noruega 11 Regions (11 <i>counties</i>)

Regional Gender Equality Index

3 domains(Education, Work, Leader)

NUT III	W/M Edu	W/M Dip	W/M Wage	W/M Earn	W/M Lead	EDUC	EDU =1	WorkWageiderança Ec	TOTAL	RANK	
	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]
Área Metropolitana de Lisboa	1.39	1.31	0.82	0.98	0.49	1.35	1	0.9	0.49	0.80	1
Alto Alentejo	1.67	2.17	0.84	0.99	0.47	1.92	1	0.92	0.47	0.80	1
Algarve	1.55	1.71	0.88	0.95	0.47	1.63	1	0.92	0.47	0.80	1
Oeste	1.62	1.92	0.82	0.99	0.45	1.77	1	0.91	0.45	0.79	2
Terras de Trás-os-Montes	1.78	1.26	0.91	1.07	0.36	1.52	1	0.99	0.36	0.78	3
Médio Tejo	1.66	1.01	0.81	0.93	0.46	1.33	1	0.87	0.46	0.78	3
Alentejo Central	1.62	1.54	0.85	0.94	0.43	1.58	1	0.9	0.43	0.78	3
Douro	1.66	1.63	0.91	0.95	0.38	1.64	1	0.93	0.38	0.77	4
Beira Baixa	1.55	1.64	0.85	0.92	0.42	1.6	1	0.88	0.42	0.77	4
Região de Coimbra	1.57	1.58	0.8	0.95	0.42	1.57	1	0.87	0.42	0.77	4
Beiras e Serra da Estrela	1.61	1.33	0.85	1	0.37	1.47	1	0.92	0.37	0.77	4
Área Metropolitana do Porto	1.46	1.44	0.82	0.89	0.43	1.45	1	0.86	0.43	0.76	5
Lezíria do Tejo	1.65	1.22	0.87	0.79	0.44	1.44	1	0.83	0.44	0.76	5
Ave	1.6	1.73	0.83	0.88	0.4	1.66	1	0.86	0.4	0.75	6
Alto Minho	1.62	1.46	0.85	0.97	0.34	1.54	1	0.91	0.34	0.75	6
Tâmega e Sousa	1.75	1.04	0.88	0.81	0.39	1.4	1	0.85	0.39	0.75	6
Região de Leiria	1.65	1.38	0.78	0.8	0.44	1.51	1	0.79	0.44	0.74	7
Cávado	1.52	1.39	0.85	0.85	0.38	1.46	1	0.85	0.38	0.74	7
Alentejo Litoral	1.59	1.55	0.76	0.7	0.48	0.8	1	0.73	0.48	0.74	7
Viseu Dão Lafões	1.63	1.55	0.84	0.85	0.36	1.59	1	0.85	0.36	0.74	7
Região de Aveiro	1.53	1.28	0.78	0.83	0.4	1.4	1	0.81	0.4	0.74	7
Alto Tâmega	1.78	4.7	0.83	0.82	0.38	3.24	1	0.82	0.38	0.74	7
Baixo Alentejo	1.68	1.58	0.78	0.77	0.42	1.63	1	0.78	0.42	0.73	8

Some problems in the construction of regional indices

- Lack of regionally disaggregated information regularly collected
- Different places as an element of geographic referencing for the same individual (Person X, has domicile in region 1 but works in region 2; Person Y lives in region 1 but studies in region 3; etc.)
Statistics of Education, Labour, Infrastructures etc are allocated differently in a given territorial space.
- Ratio Female/Male, is truncate data at the equality benchmark (value = 1)
- The same 'equality' level may correspond to very different level of the values. Only the relation of the female and male is considered ignoring the two absolute values.

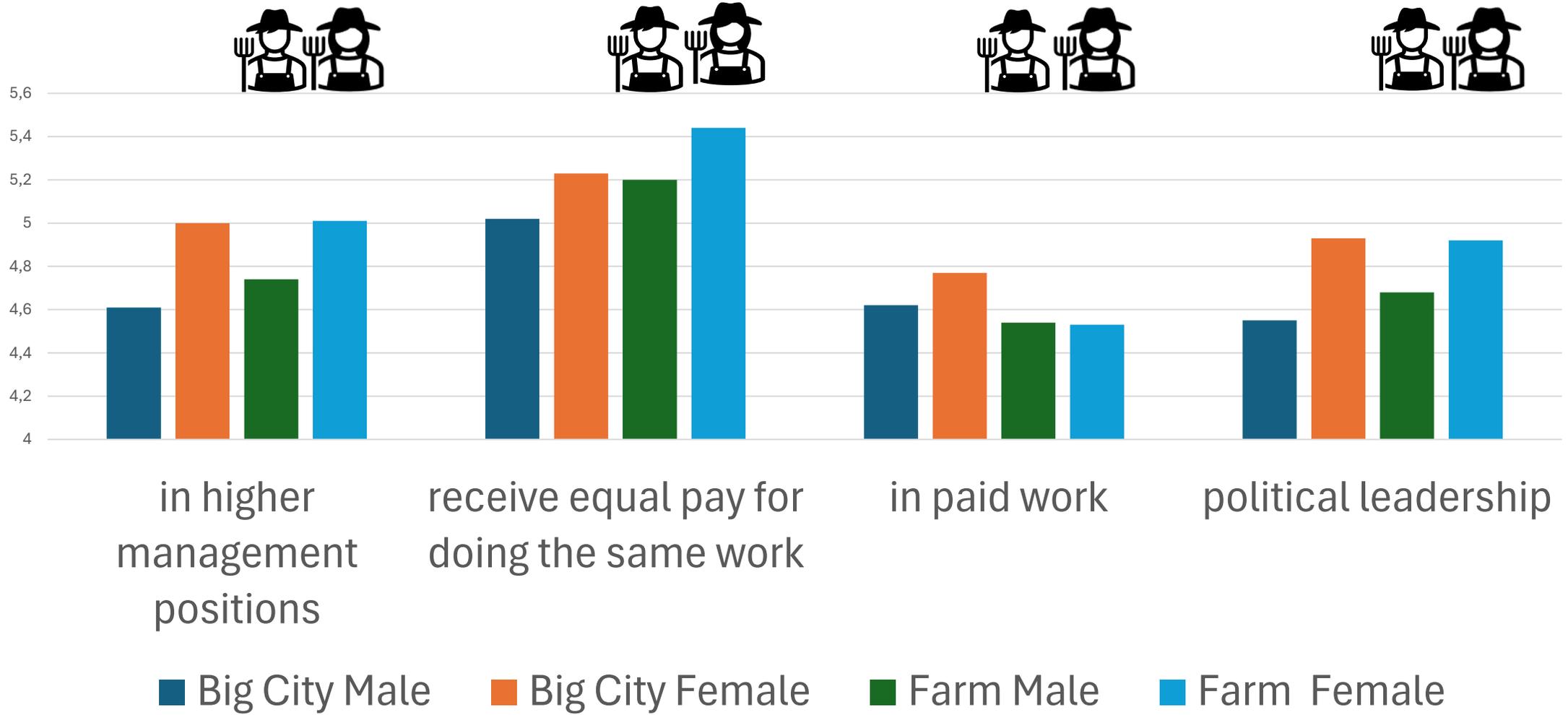
Gender Equality Attitudes, Opinions and Regional Variations

- Are there urban/farm differences in gender attitudes with impact on gender equality outcomes?
- What factors influence gender **attitudes and opinions** and the **effectiveness of gender equality policies**

ESS 2024 : “Is bad or good for...

- **family life** in [country] if equal numbers of women and men are **in paid work**
- **politics** in [country] if equal numbers of women and men are in **positions of political leadership**
- **businesses** in [country] if equal numbers of women and men are **in higher management** positions
- **economy** in [country] if women and men **receive equal pay** for doing the same work

Scale: 0-6 (0=very bad; very good)



Annexes

A1_ Gender Inequalities between rural and urban areas in Portugal based on NUT III

Data Sources and Methodology

- BDs: Appendices Slides w/ list of sources
- Methodology

1) selection of 2 groups of NUT III regions based on Eurostat Classification:

- Predominantly Urban Regions (2 NUTIII Regions)
- Intermediate (excluded from analysis)
- Predominately Rural (16 NUT III Regions)

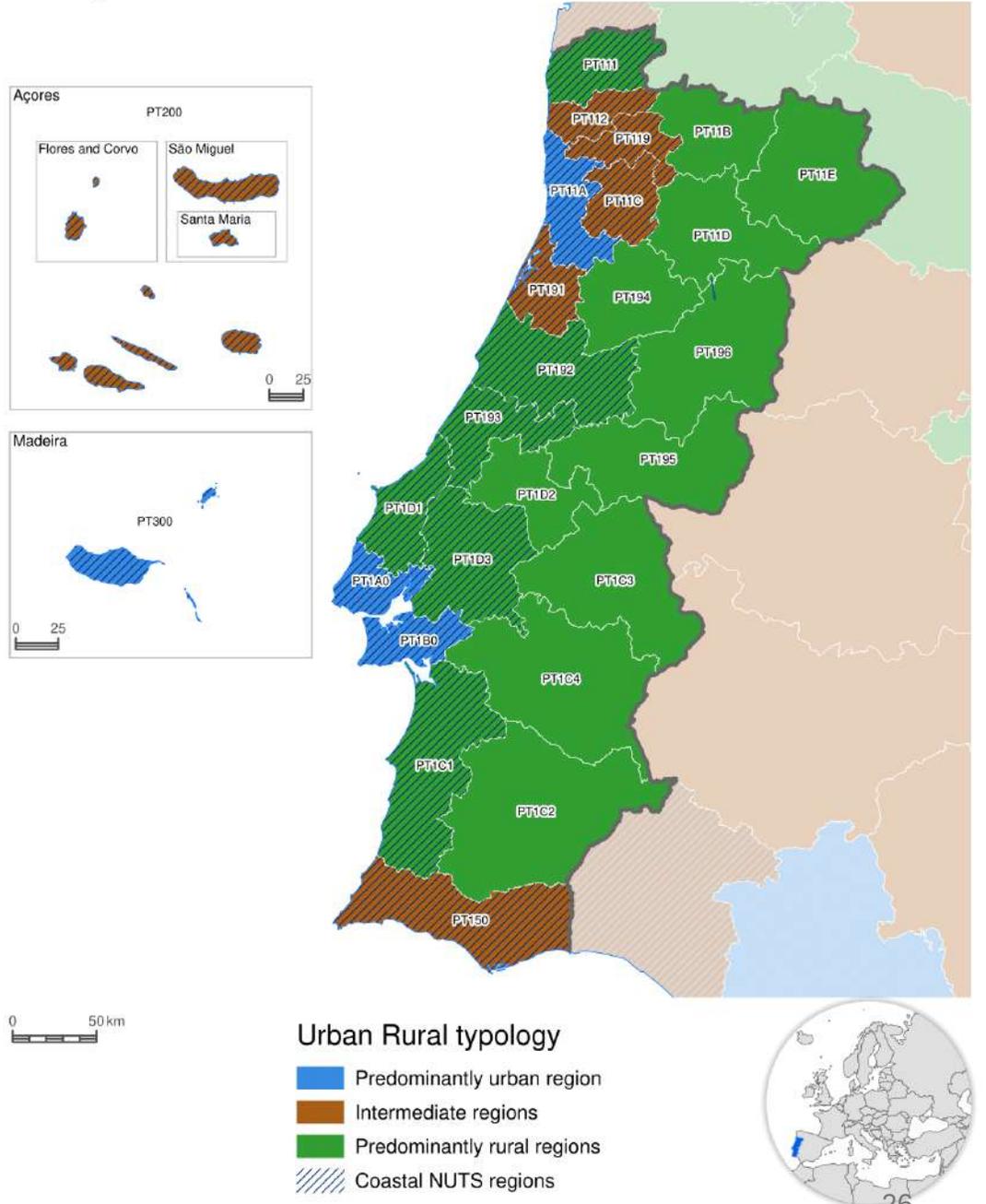
2) Network analysis based on 4 gender inequality indicators (value for Female/ Value for Male):

- $R_{PRes\ Esup} = \frac{N \text{ Female with tertiary Education in the region}}{N \text{ Male with Tertiary Education in the region}}$
- $R_{Dip\ Esup} = \frac{N \text{ Female with Uni diploma in the region}}{N \text{ Male with Uni diploma in the region}} \cdot \frac{N \text{ Female with tertiary Education in the region}}{N \text{ Male with Tertiary Education in the region}}$
- $R_{Ganho} = \frac{\text{Wage mean of Female in the region}}{\text{Wage mean of Male in the region}}$
- $R_{TPCO} = \frac{N \text{ Wage earner Female in the region}}{N \text{ Wage earner Male in the region}}$

Alto Minho	predominantly rural
Cávado	intermediate
Ave	intermediate
Área Metropolitana do Porto	predominantly urban
Alto Tâmega e Barroso	predominantly rural
Tâmega e Sousa	intermediate
Douro	predominantly rural
Terras de Trás-os-Montes	predominantly rural
Algarve	intermediate
Região de Aveiro	intermediate
Região de Coimbra	predominantly rural
Região de Leiria	predominantly rural
Viseu Dão Lafões	predominantly rural
Beira Baixa	predominantly rural
Beiras e Serra da Estrela	predominantly rural
Grande Lisboa	predominantly urban
Península de Setúbal	predominantly urban
Alentejo Litoral	predominantly rural
Baixo Alentejo	predominantly rural
Alto Alentejo	predominantly rural
Alentejo Central	predominantly rural
Oeste	predominantly rural
Médio Tejo	predominantly rural
Lezíria do Tejo	predominantly rural

NUTS 2024 classification is valid from 01.01.2024.
92 regions at NUTS 1, 244 regions at NUTS 2 and 1 165 regions at NUTS 3.

Portugal - NUTS level 3



NUT III Regions, Continental

2 groups based on Eurostat Classification

Urban(#3 regions) Rural (#16 regions)

Alto Minho	predominantly rural
Área Metropolitana do Porto	predominantly urban
Alto Tâmega e Barroso	predominantly rural
Douro	predominantly rural
Terras de Trás-os-Montes	predominantly rural
Região de Coimbra	predominantly rural
Região de Leiria	predominantly rural
Viseu Dão Lafões	predominantly rural
Beira Baixa	predominantly rural
Beiras e Serra da Estrela	predominantly rural
Grande Lisboa	predominantly urban
Península de Setúbal	predominantly urban
Alentejo Litoral	predominantly rural
Baixo Alentejo	predominantly rural
Alto Alentejo	predominantly rural
Alentejo Central	predominantly rural
Oeste	predominantly rural
Médio Tejo	predominantly rural
Lezíria do Tejo	predominantly rural

NUT III Regions, Continental

2 groups based on Eurostat Classification

Urban(#2 regions) Rural (#16 regions)

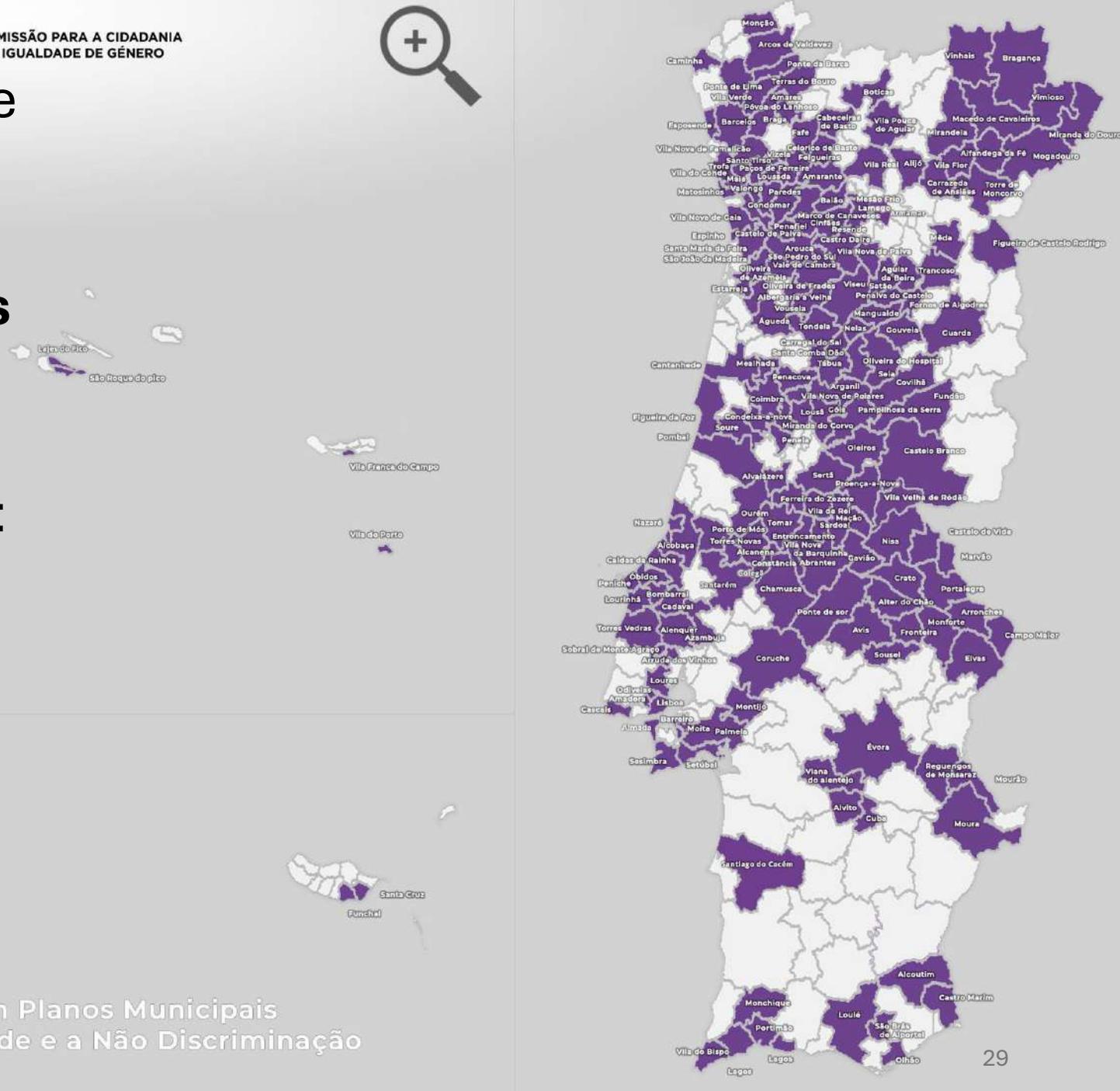
Tipology	REGION NUT III	F/M UniversityEdu	F/M UniDiploma	F/M Wage(mean)	F/M WageEarner
Rural	Alentejo Central	1.62	1.54	0.85	0.94
Rural	Alentejo Litoral	1.59	1.5	0.76	0.7
Rural	Alto Alentejo	1.67	2.17	0.84	0.99
Rural	Alto Minho	1.62	1.46	0.85	0.97
Rural	Alto Tâmega	1.78	4.7	0.83	0.82
Urban	Área Metropolitana de Lisboa	1.39	1.31	0.82	0.98
Urban	Área Metropolitana do Porto	1.46	1.44	0.82	0.89
Rural	Baixo Alentejo	1.68	1.58	0.78	0.77
Rural	Beira Baixa	1.55	1.64	0.85	0.92
Rural	Beiras e Serra da Estrela	1.61	1.33	0.85	1
Rural	Douro	1.66	1.63	0.91	0.95
Rural	Lezíria do Tejo	1.65	1.22	0.87	0.79
Rural	Médio Tejo	1.66	1.01	0.81	0.93
Rural	Oeste	1.62	1.92	0.82	0.99
Rural	Região de Coimbra	1.57	1.58	0.8	0.95
Rural	Região de Leiria	1.65	1.38	0.78	0.8
Rural	Terras de Trás-os-Montes	1.78	1.26	0.91	1.07
Rural	Viseu Dão Lafões	1.63	1.55	0.84	0.85



Municipal Plans for Equality are instruments for planning **public policies for equality at local level**, which establish **strategies for transforming gender asymmetries** revealed by **gender diagnosis carried out at local level**, integrating **gender mainstreaming measures and specific actions**, setting:

- objectives
- indicators
- targets

to be achieved and their respective assessment.



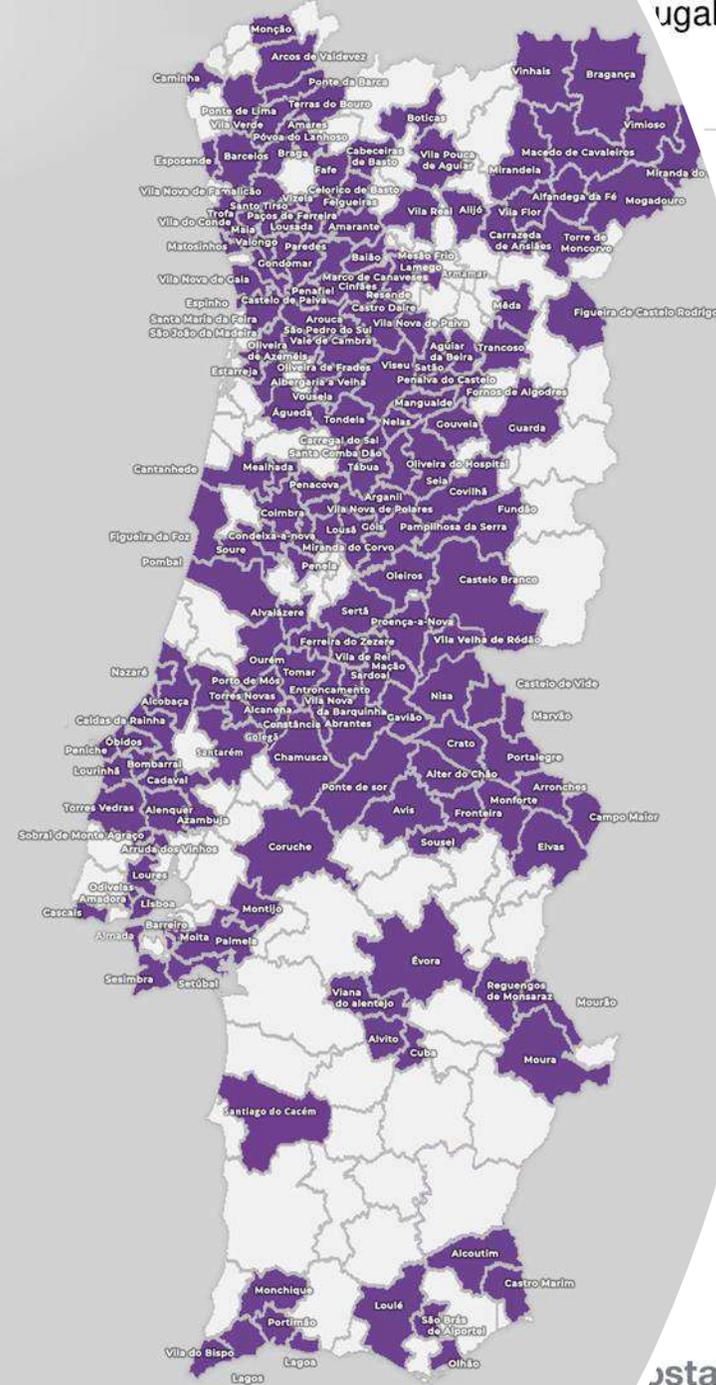
Concelhos com Planos Municipais para a Igualdade e a Não Discriminação

- 36% of national municipalities have a Municipal Plan for Equality;

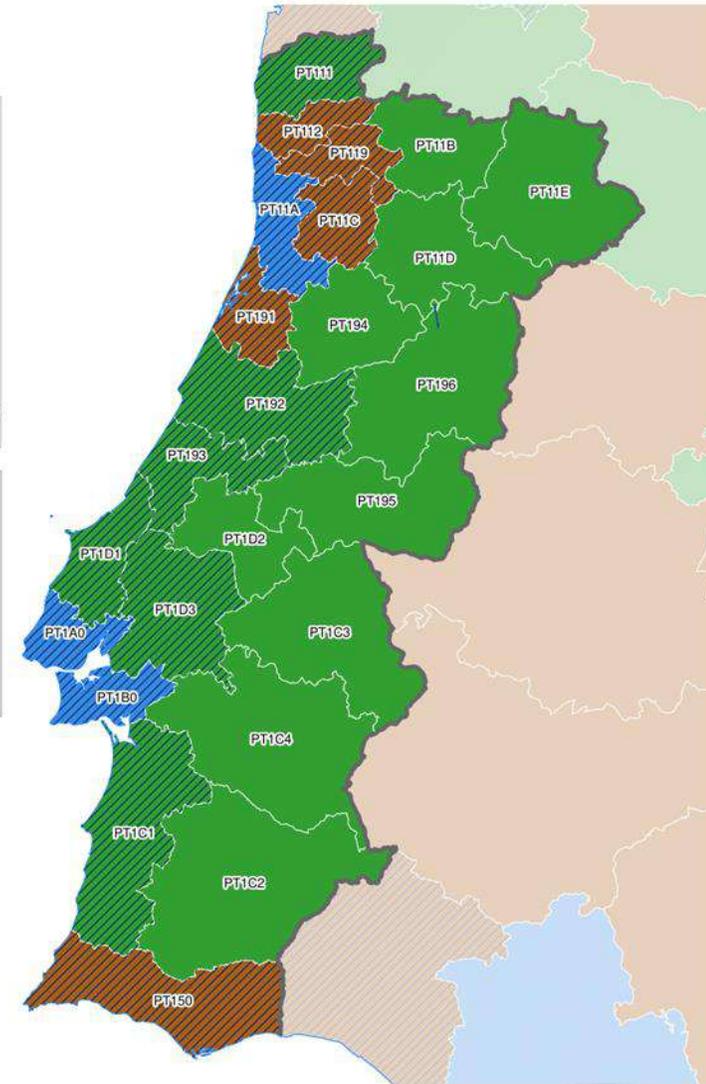
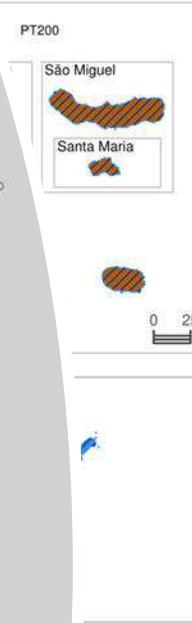
- 82% of national municipalities have a Protocol with the CIG;

- 72% appointed a Local Equality Advisor

- 35% appointed Local Equality Teams



ugal - NUTS level 3



Urban Rural typology

- Predominantly urban region
- Intermediate regions
- Predominantly rural regions
- ▨ Coastal NUTS regions



Portugal (1997-2030)

Plans for Gender Equality and Non-Discrimination

- I Plano Global para a Igualdade de Oportunidades (1997);
- II Plano Nacional para a Igualdade (2003-2006);
- III Plano Nacional para a Igualdade – Cidadania e Género (2007-2010);
- IV Plano Nacional para a Igualdade, Género, Cidadania e Não Discriminação (2011-2013);
- V Plano Nacional para a Igualdade de Género, Cidadania e Não Discriminação, (2014-2017) (PNI);
- Plano de Ação para a Igualdade entre Mulheres e Homens, (2018-2021) (PAIMH).
- Estratégia Nacional para a Igualdade e a Não Discriminação – Portugal + Igual (ENIND) 2023-2026 [2018-2030]

Portugal + Igual (ENIND) 2023-2026 [2018-2030]

The ENIND strategy is based on three transversal lines of action:

- “**intersectionality**, given that discrimination results from the intersection of multiple factors;
- **territorialization**, reinforcing that public policies must adapt to territorial characteristics and needs and partnerships, in a logic of sharing practices, co-responsibility and optimization of means and networks” (CIG, 2018).

The characteristics that must exist in statistical information and indicators (CIG, 2022)

- 1) The data collected and presented must be disaggregated by sex/gender
- 2) Reflect gender issues;
- 3) Be based on concepts and definitions that must demonstrate the situations of women and men, capturing all aspects of their lives;
- 4) Take into account stereotypes and social and cultural aspects;
- 5) Aim to promote understanding of the real situation in society;
- 6) Stimulate the exchange of ideas and political debates and reduce stereotypes.

Results

