

Gender (in)equality dimensions in European climate risk assessment

Equality under the weather?
European Research Area Workshops on the
Gender Dimension in Research

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United Nations
Climate Change



COP29
Baku
Azerbaijan



Objectives

- ✦ O1: new probabilistic assessment of climate hazards, damages and risks
- ✦ O2: granular socioeconomic projections, including gender and multidimensional vulnerabilities
- ✦ O3: Insights on mitigation-adaptation synergies and trade-offs
- ✦ O4: Co-development with public and private stakeholders
- ✦ O5: Co-design stress-test scenarios that explore socioeconomic climate risks

Support risk-based decision making for a climate resilient Europe



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Research and Innovation SERI

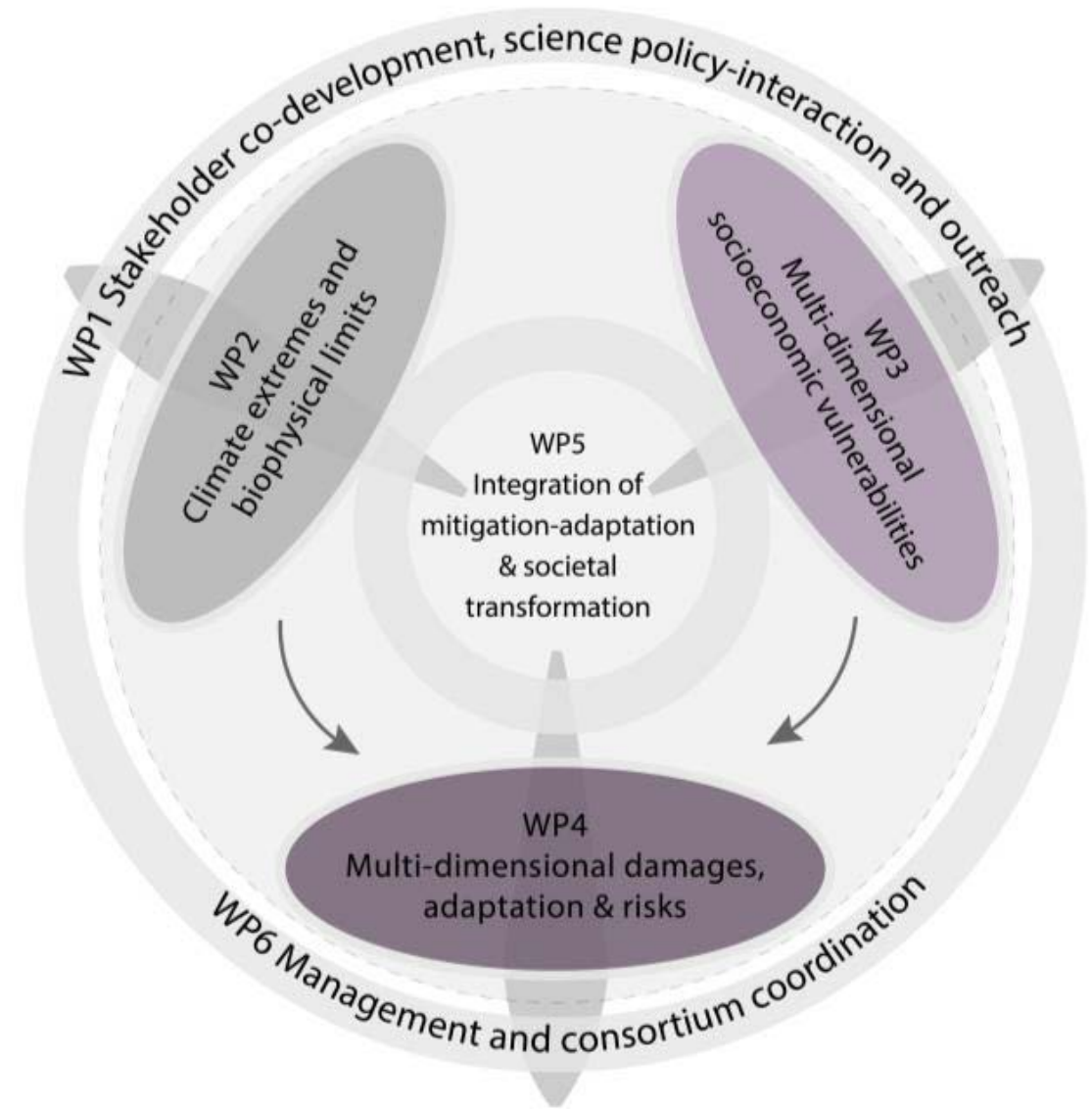


Co-funded by the European Union, SERI & UKRI



Work-packages

- ♀♂ WP1 – Stakeholders & policy
- WP2 – Climate extremes & impacts
- ♀♂ WP3 – Socioeconomics & vulnerability
- ♀♂ WP4 – Damages, adaptation & risk
- ♀♂ WP5 – Integration, synergies & tradeoffs
- ♀♂ WP6 – Project management



Gender (in)equality & adaptation challenges

Women are disproportionately affected by climate extremes:

- Lower adaptive capacity due to the lack of access to resources
- Responsible for securing fuel or water
- More susceptible to water-related infections
- Unable to swim/prevented by traditional clothing

...and in the aftermath of climate extremes:

- Exposed to domestic violence
- Increased likelihood of early marriage
- Increased likelihood to interrupt or end schooling

...while men are unfavorably affected in the following:

- More exposed in the building sector
- More likely to die in floods and storms
- More likely to be victims of suicide & depression during droughts



Source: Shutterstock/Grist

Gender (in)equality & mitigation challenges

Strengthening institutions and decision-making:

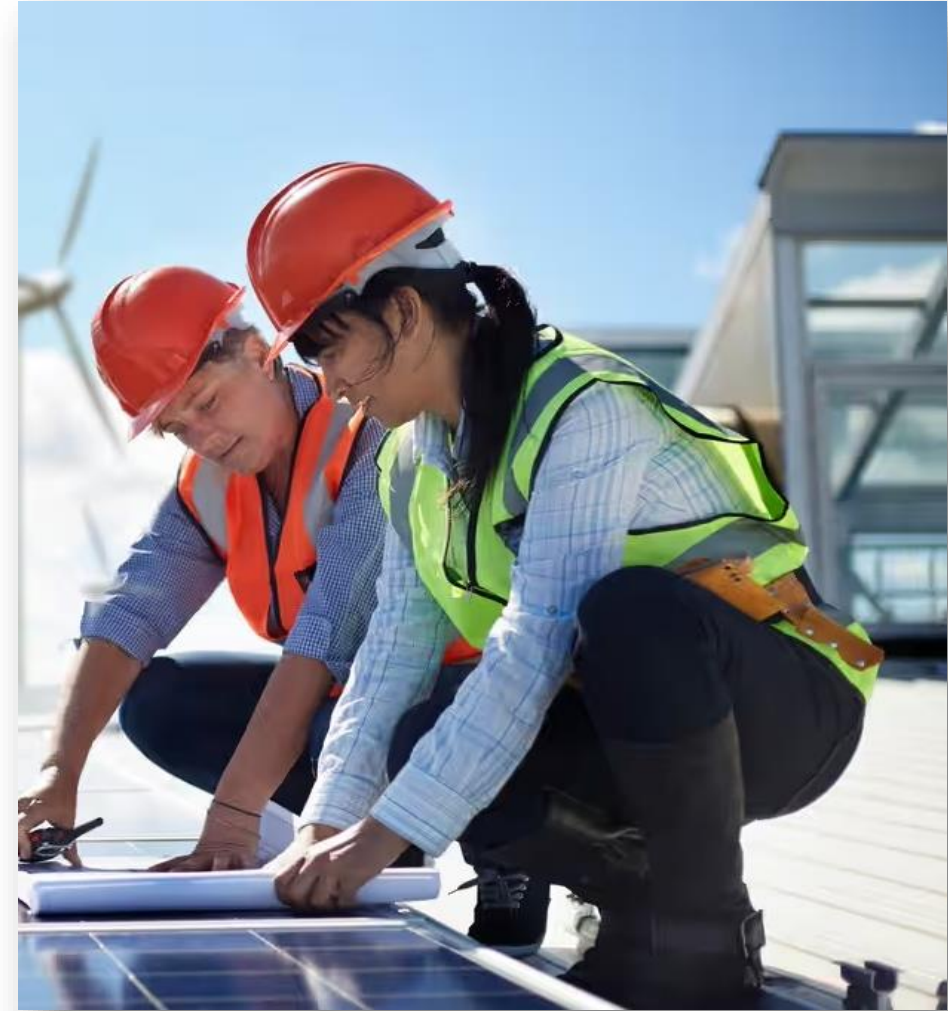
- Higher share of women in parliament connected to more stringent climate policy
- Female bureaucrats more likely to promote green procurement

Strengthening human capital:

- Female researchers % positively associated with innovative capacity
- More labor force available to support clean energy transition
- What if higher participation of women in education and labor force leads to higher emissions?

Behavioral change towards low-emissions demand side:

- The higher gender equality, the weaker the association between GDP per capita and CO2 emissions
- Women's consumer choices tend to be more "climate friendly"
- Are women inherently more climate friendly than men, or are they simply poorer?



Source: Trevor Adeline/Plainpicture

SPARCCE Call text

✧ A national, and as much as possible regional, resolution should be aimed at in order to account for heterogeneity in terms of hazards, exposure, vulnerability (including adaptive capacities) and ability to manage risks across countries and regions.

Distributional and further equity considerations, including gender, associated with climate change impacts should also be investigated in order to inform the formulation of just mitigation and adaptation strategies.

SPARCCE proposal

Use of sex-disaggregated gender data wherever possible

- ✧ ... designing a gender inequality indicator on a subnational scale for the present and for future scenarios, which will be used as an additional layer of the vulnerability assessment, to identify the extent to which gender inequality exacerbates other drivers of vulnerability (26, 39). Identification of such “hotspots” of vulnerability in terms of gender inequality can be used for focused policy efforts in problematic locations, where particular emphasis needs to be put on eliminating sources of discrimination in terms of e.g., access to resources or education, if the overall societal capacity to adapt is to be increased.
- ✧ ... gender-relevant aspects of mitigation and adaptation strategies, as sectors most involved in climate-relevant transformations impacted (negatively or positively) are commonly male-dominated (e.g., coal mining, construction, energy supply), ... requires a better understanding of gender differences in employment in affected sectors (and thereby access to resources and broader empowerment) in scenarios of future transformations. ... estimate the change in the sectoral allocation of jobs that will be mandated by the deployment of mitigation and adaptation strategies to assess potential implications for gender-disaggregated socioeconomic wellbeing.

Climate extremes

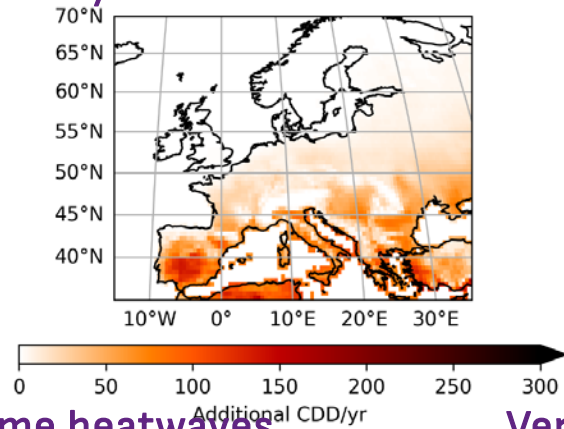
✧ Europe-wide, probabilistic projections of climate hazards and extreme events

✧ Europe & World – gridded 50km & NUTS2/3 regions

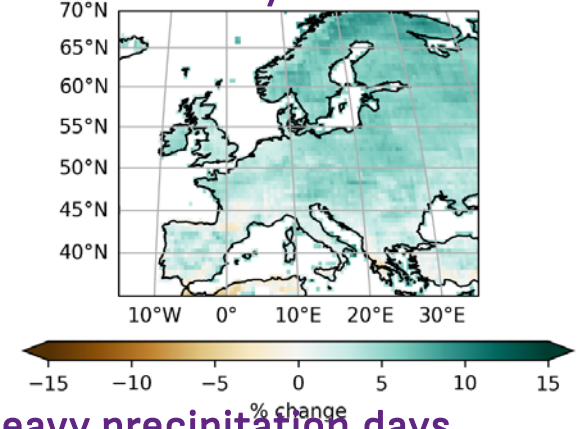
✧ Exposure of people, sectors, ecosystems & economy

ModAct in 2050, 1.95 °C

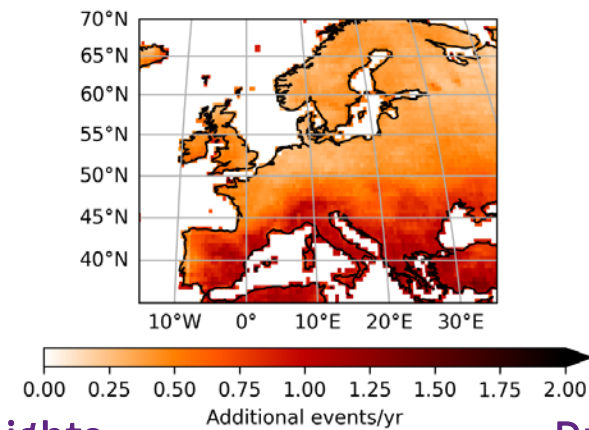
Cooling degree days



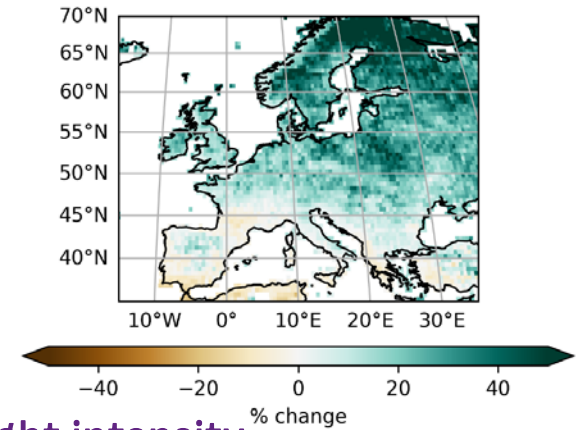
Precipitation intensity index



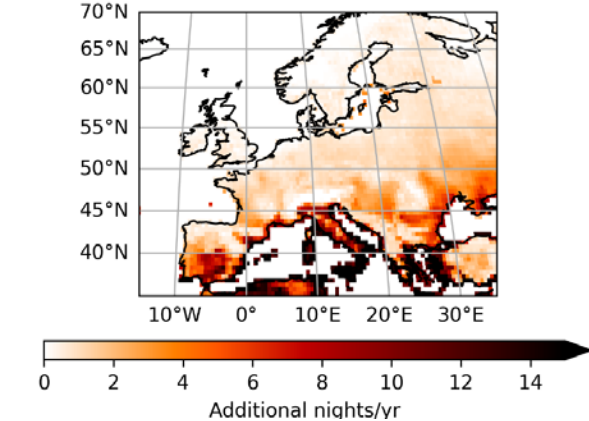
5-day extreme heatwaves



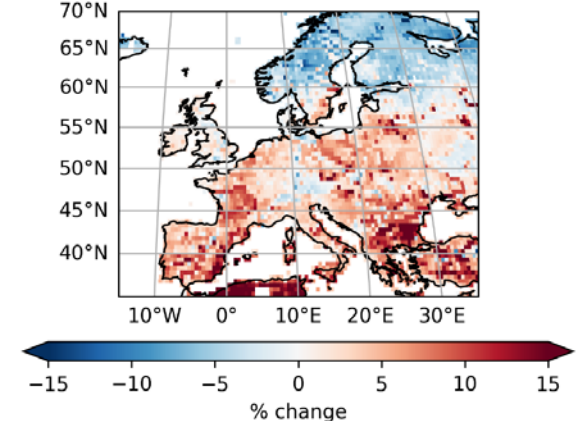
Very heavy precipitation days



Tropical nights



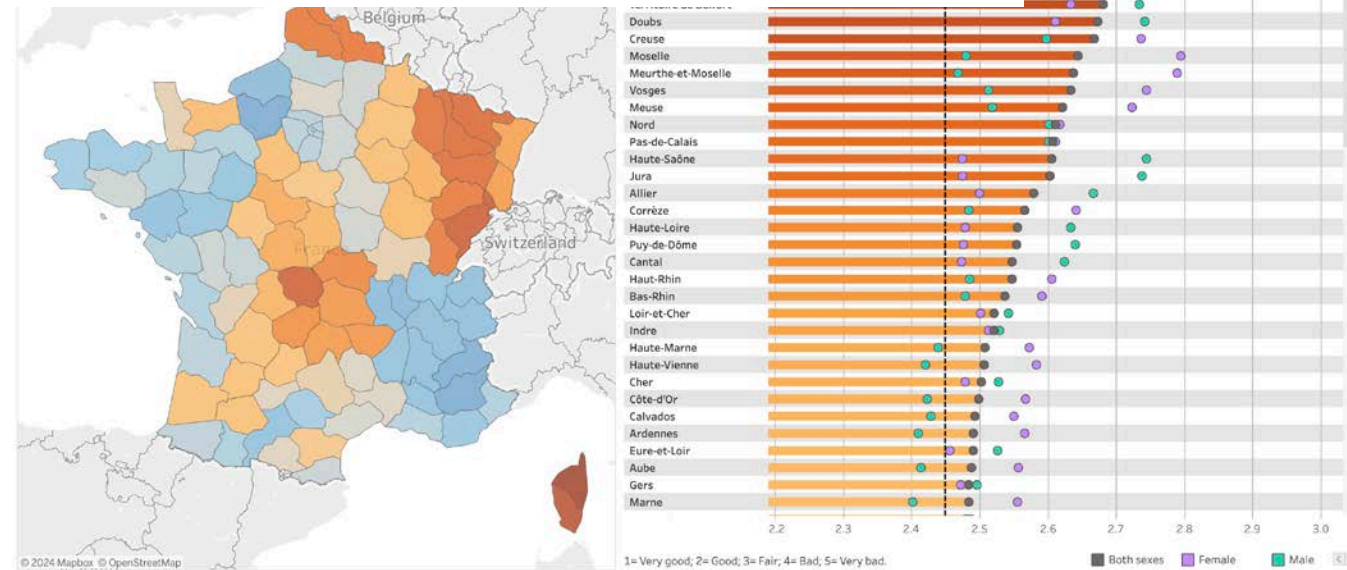
Drought intensity



Socioeconomic projections and vulnerabilities

- ✧ National/-sub Eur-SSP socioeconomic projections
- ✧ Assess exposure & adaptation capacity across socioeconomics (age/sex/education)
- ✧ Empirical assessment of climate impacts on jobs, capital, welfare for IAMs
- ✧ Drivers & projections of vulnerability using Earth Observation & AI approaches – vuln curves

General health by region and gender, 55-75 yr olds



In the proposal and in practice

- ✧ Dedicated, early task on data provision
- ✧ Present in 5/6 workpackages
- ✧ 50 mentions of gender in 45 pages
- ✧ Dedicated section, 1 page:
Mainstreaming the gender dimension
- ✧ Project monitoring & reporting
- ✧ Gender flag
- ✧ Gender champion



- ✧ Gender balance:
 - ✧ Stakeholder Advisory Board
 - ✧ Stakeholder workshops
 - ✧ Webinars & panels/manels
 - ✧ Work package leadership
 - ✧ Named researchers
 - ✧ Check Gender Equality Plans
 - ✧ Gender-sensitive & family friendly meetings and events
 - Scheduling – 10am-3pm
 - Day care at project meetings

Advertise it!
Section 3.2 Consortium / "Gender balance in the consortium"

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Thank you.

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