

# **Settlement and employment as factor of vulnerability of women to climate change in Ukraine**

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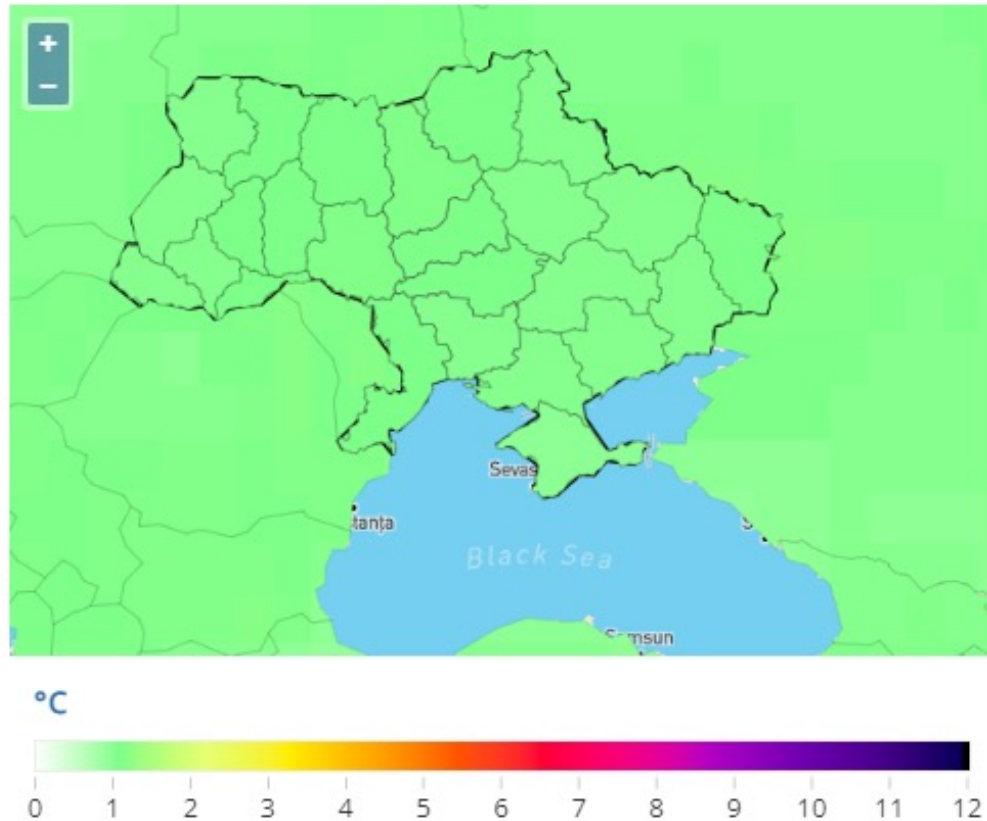
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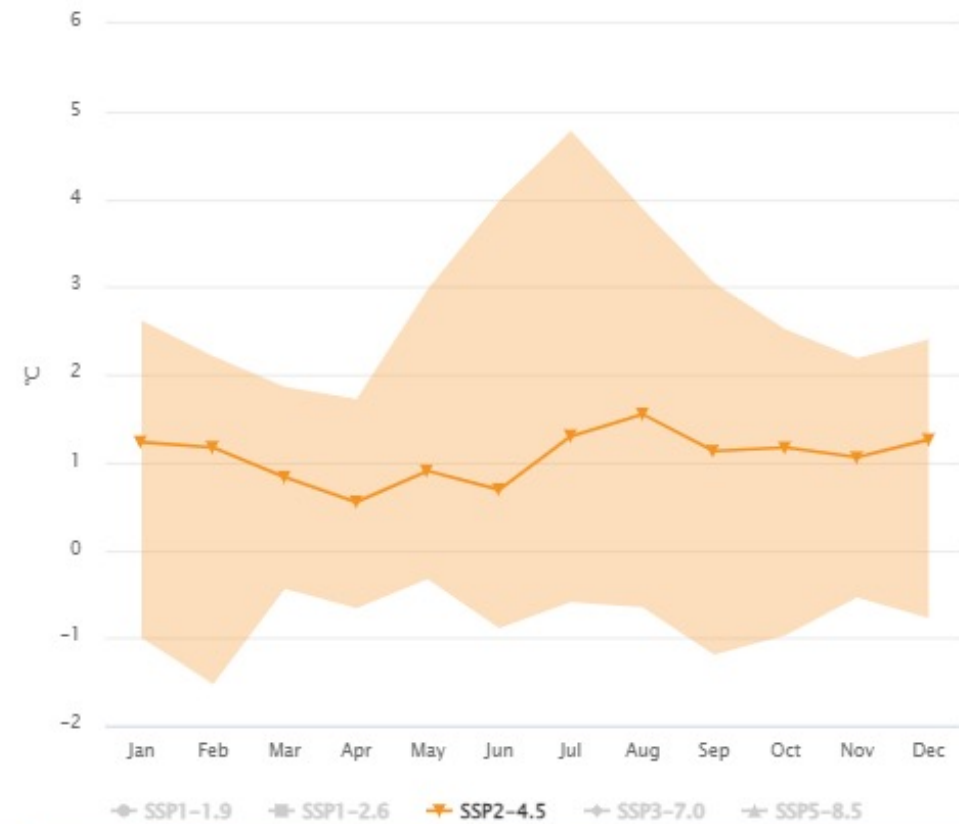
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# Projected change in mean temperature

Projected Mean-Temperature Anomaly for 2020-2039 (Annual)  
Ukraine; (Ref. Period: 1995-2014), SSP2-4.5



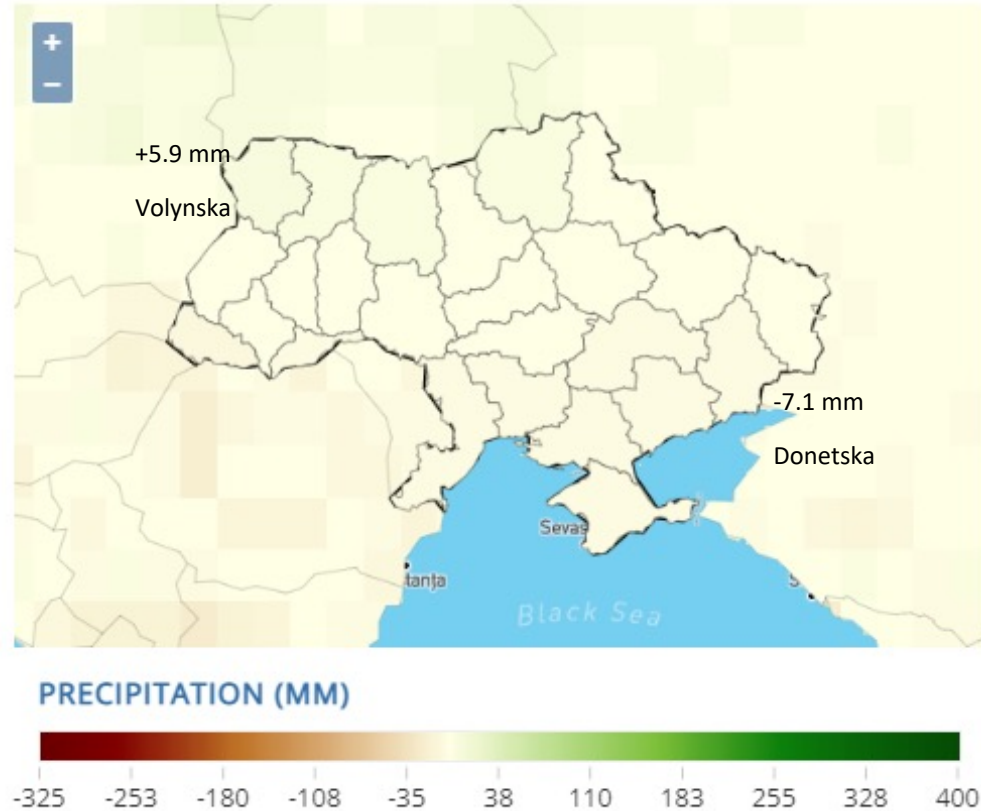
Projected Mean-Temperature Anomaly for 2020-2039  
Ukraine; (Reference Period: 1995-2014), SSP2-4.5, Multi-Model  
Ensemble



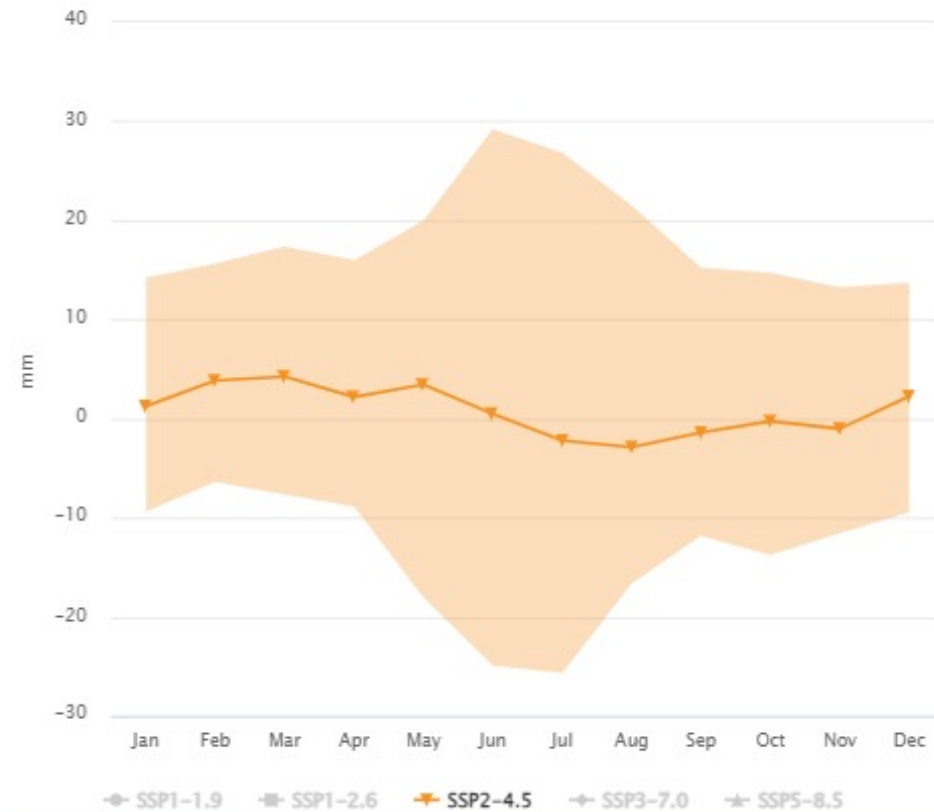
Source: <https://climateknowledgeportal.worldbank.org/country/ukraine/climate-data-projections>

# Projected change in precipitation

Projected Precipitation Anomaly for 2020-2039 (Sep-Oct-Nov)  
Ukraine; (Ref. Period: 1995-2014), SSP2-4.5

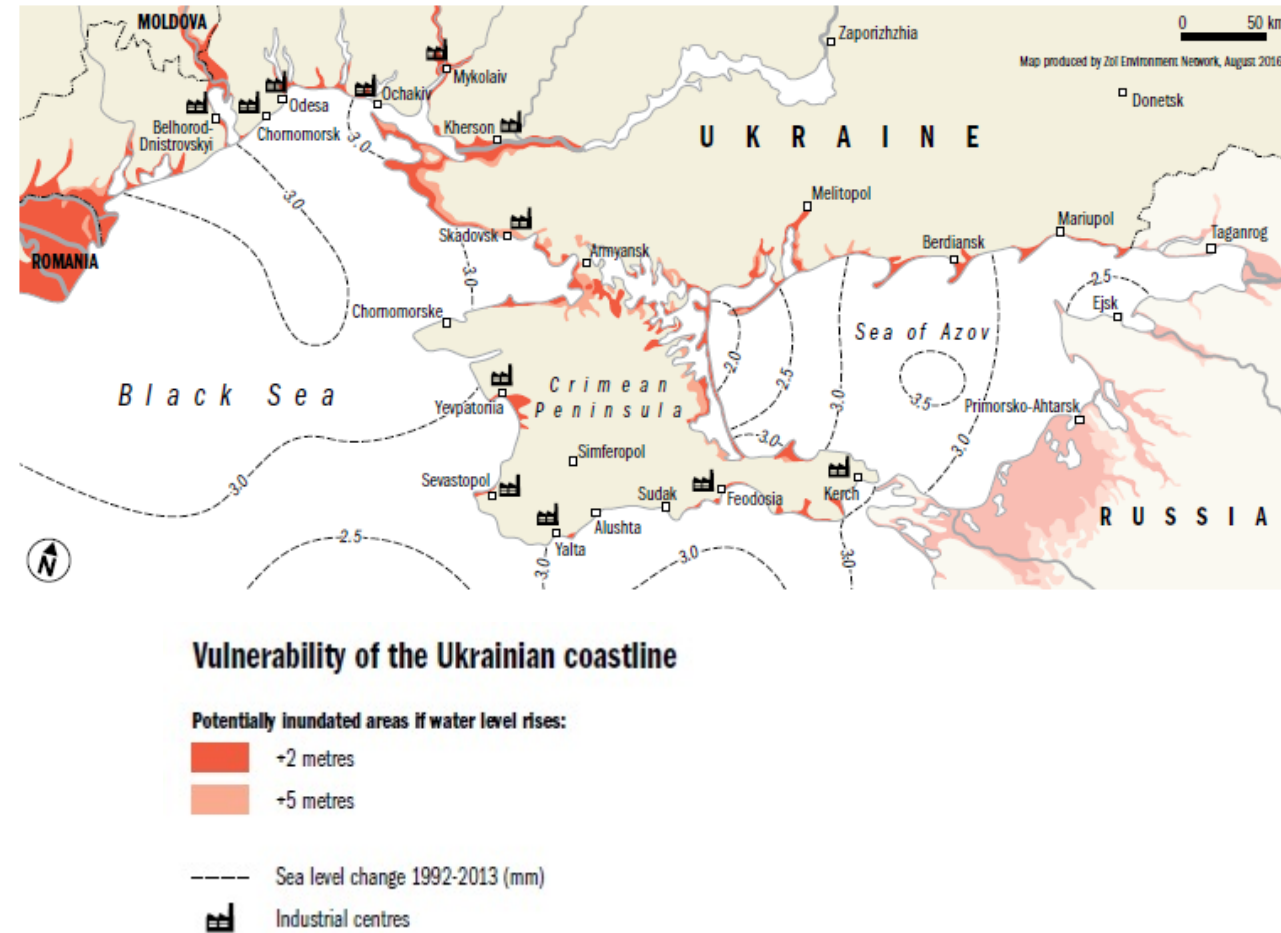
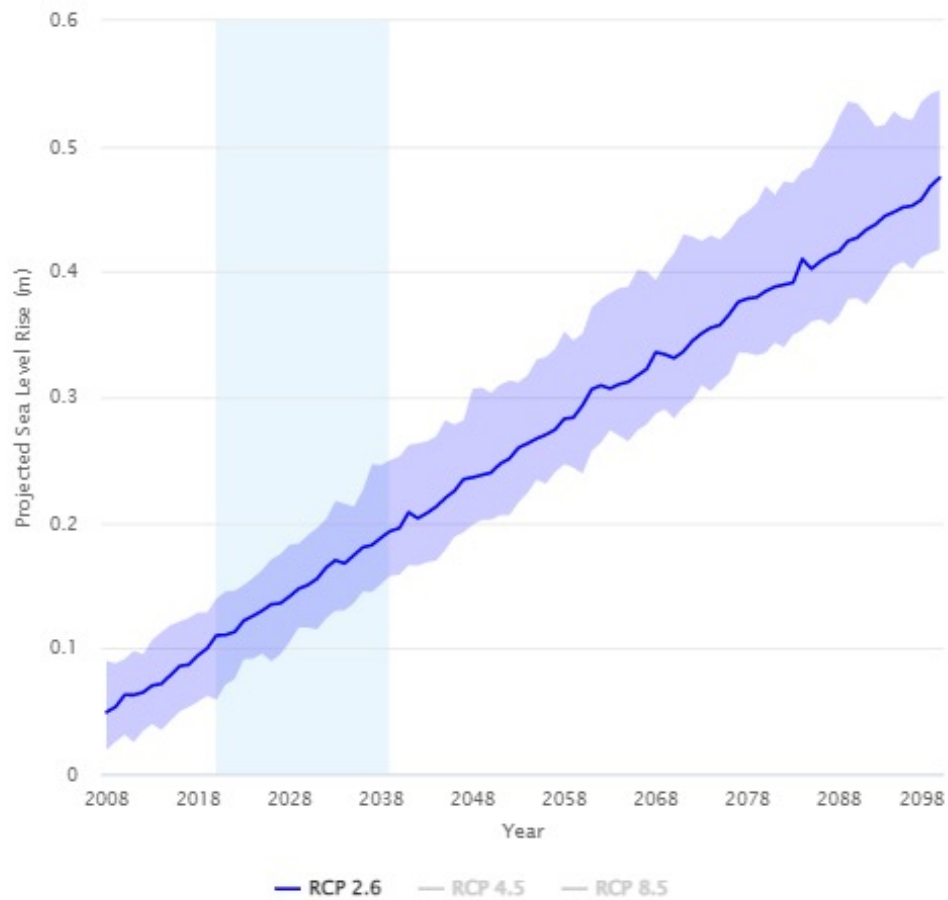


Projected Precipitation Anomaly for 2020-2039  
Ukraine; (Reference Period: 1995-2014), SSP2-4.5, Multi-Model Ensemble



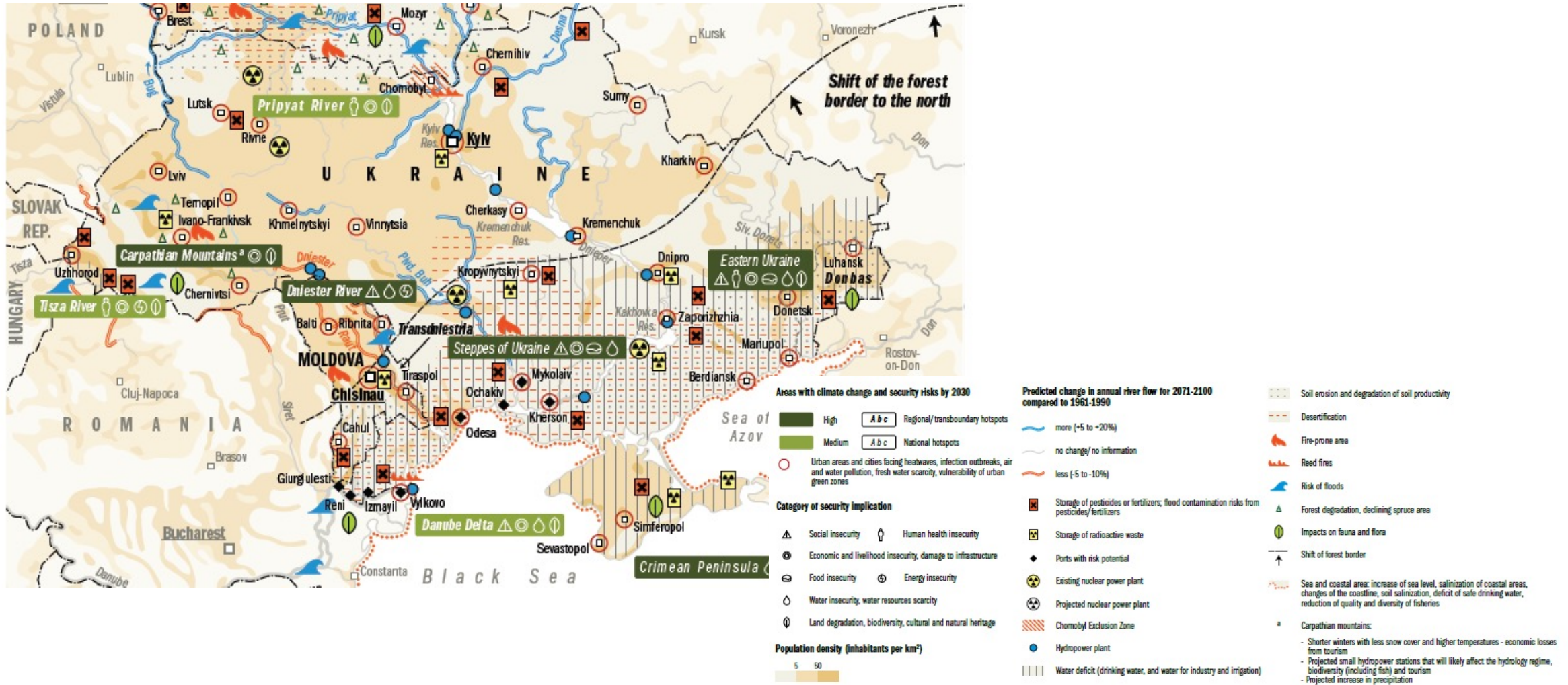
Source: <https://climateknowledgeportal.worldbank.org/country/ukraine/climate-data-projections>

# Projected sea level rise of coastal of Ukraine



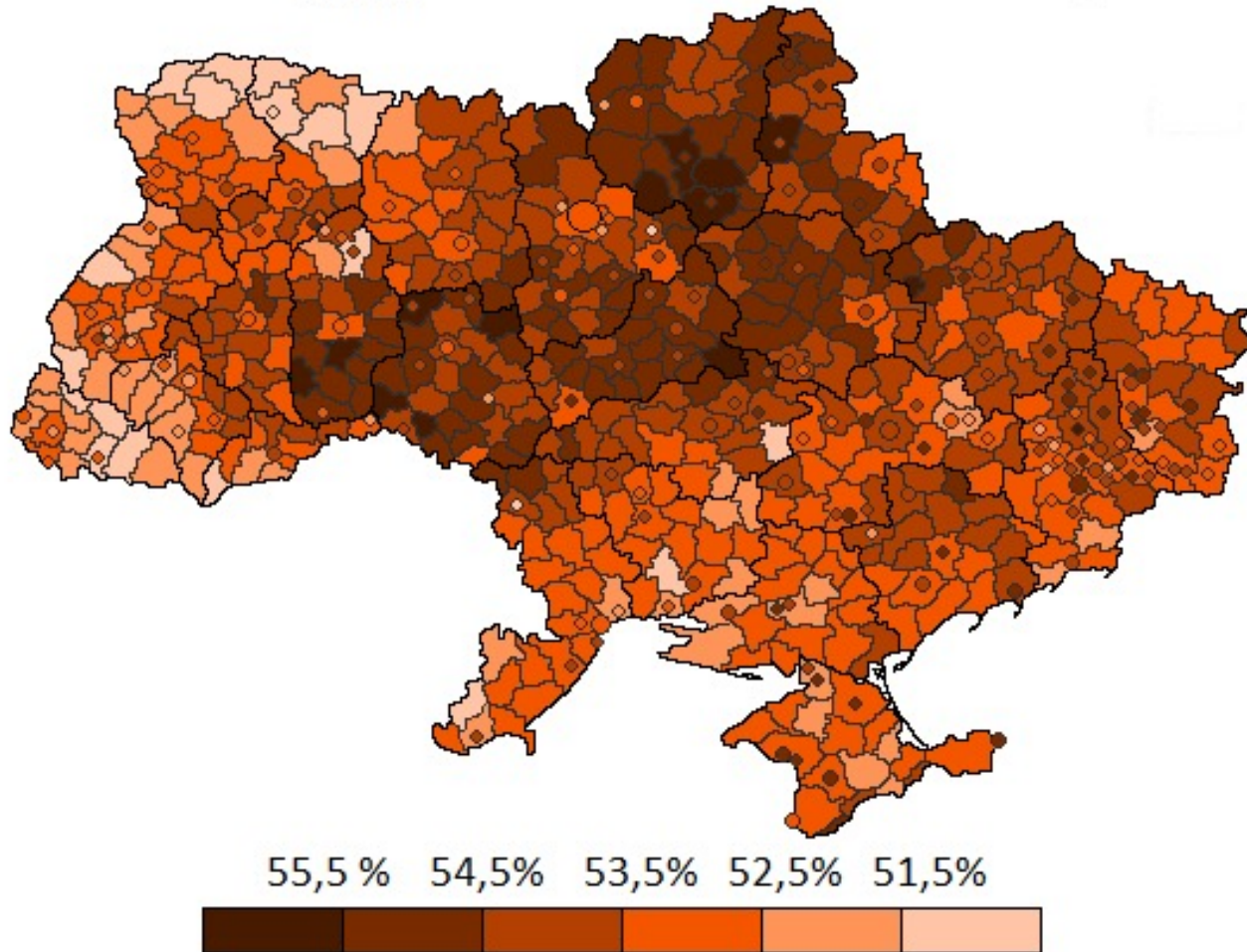
Source: <https://climateknowledgeportal.worldbank.org/country/ukraine/impacts-sea-level-rise>

# Climate change hot-spots in Ukraine



Source: Climate Change and Security in Eastern Europe: Republic of Belarus, Republic of Moldova, Ukraine – Regional Assessment Report. 2016. – 110 p. <https://www.osce.org/secretariat/355496?download=true>

# Share of woman in population, 2001



Highest number of woman in urban settlement (oblasts with the highest predominance of women in urban settlements to rural areas):

- Donetska 2,05 mln (10,2)
- Kyiv city 1,57 mln
- Dnipropetrovska 1,46 mln (5,4)
- Kharkiska 1,15 mln (4,4)
- Luhanska 1,01 mln (6,9)

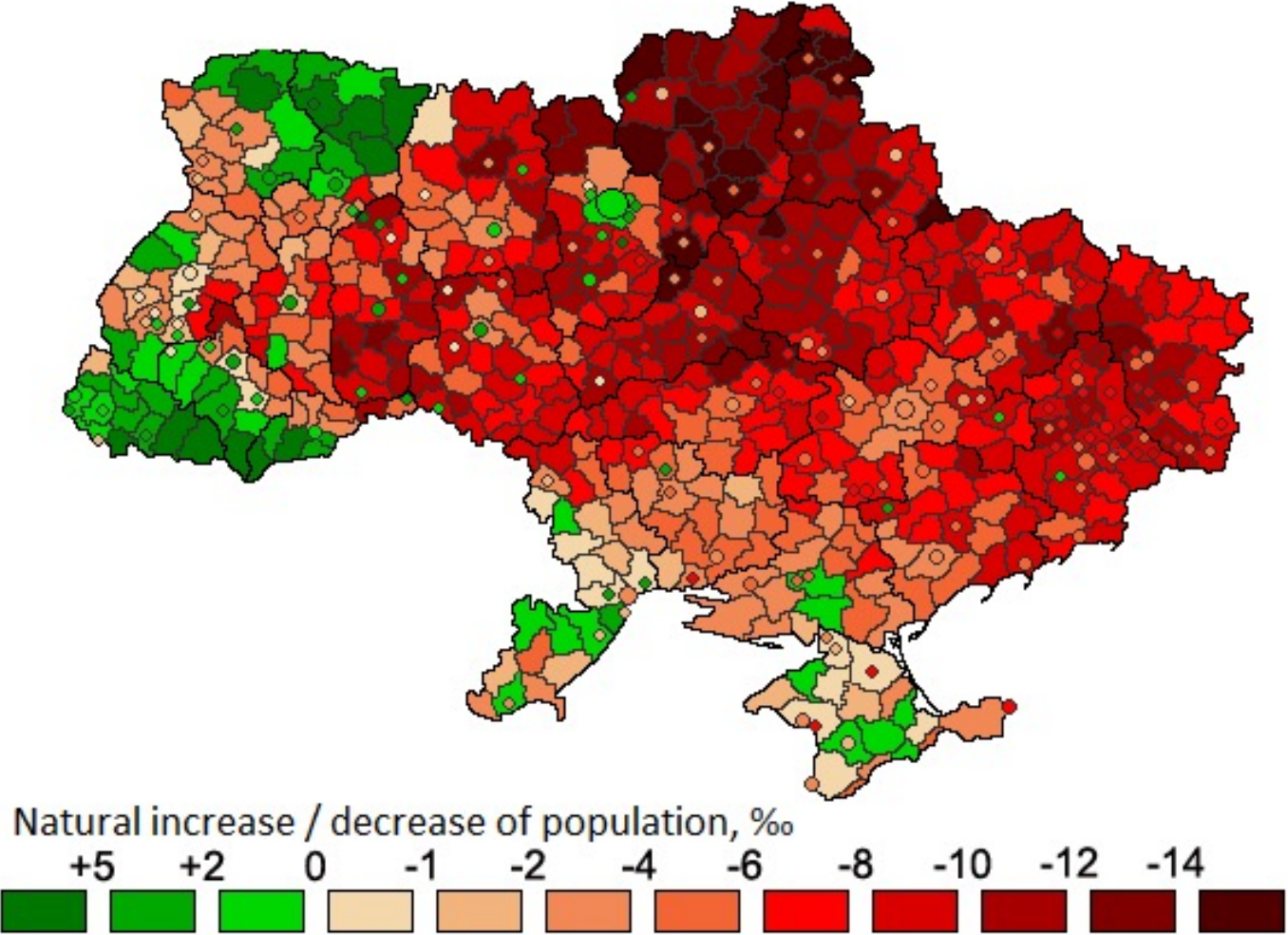
Highest number of woman in rural areas:

- Lvivska 0,51 mln
- Odeska, Zakarpatska 0,41 mln
- Vinnytska, Ivano-Frankivska 0,40 mln

Oblasts with a predominance of women in rural areas to urban settlements:

- Zakarpatska, Chernivetska, Ternopilska, Ivano-Frankivska, Rivnenska

# Natural increase / decrease of population, 2010-2015



Regions with the highest share of woman has the most intensive depopulation – ageing of population, esp. woman, in rural areas: northern-eastern and central Ukraine

Rural areas:  
Vulnerability due demographical structure of population: predisposition of people / women, esp. elderly to cardiovascular diseases;  
Poor availability of medical and social services due settlement pattern (small and dispersed villages in Northern Ukraine)

# Cities, urban settlements

## Climate change

- abnormally high temperatures that last for a certain amount of time and cause “urban heat islands” and heat stress for residents;
- flooding and landslides;
- increased vulnerability of urban green zones, their decline;
- natural hydrometeorological phenomena, increasing their frequency and destructive effects on infrastructure;
- deterioration of the quality and quantity of drinking water in a certain area;
- increase in the number of infectious diseases and allergic manifestations in the population;
- increased energy vulnerability settlement systems for destruction, the stability of energy supply.

Source: Шевченко О. Оцінка вразливості до зміни клімату: Україна. – Київ, 2014. – 74 с.

## Negative impact:

- is strengthened due to the specifics of urban spaces and high population density;
- health impact: direct - the effects of heat waves on physical health, indirectly through natural systems, such as infectious or water-borne diseases, and indirectly through the disruption of socio-economic systems, such as malnutrition;
- deterioration of transport mobility - inadequacy of public transport, which is used by the majority of the population of large cities of Ukraine to abnormal natural conditions;
- public spaces are not adapted to climate change, do not have air conditioning systems, access to drinking water become uncomfortable for visitors, esp. woman with children.

Source: Кліматична (не)справедливість: вплив зміни клімату на вразливі соціальні групи в містах України / Cedos, Еколтава, Heinrich Boll Stiftung Київ. – Київ, 2020. – 72 с.



## Vulnerability of woman to climate change in Ukraine

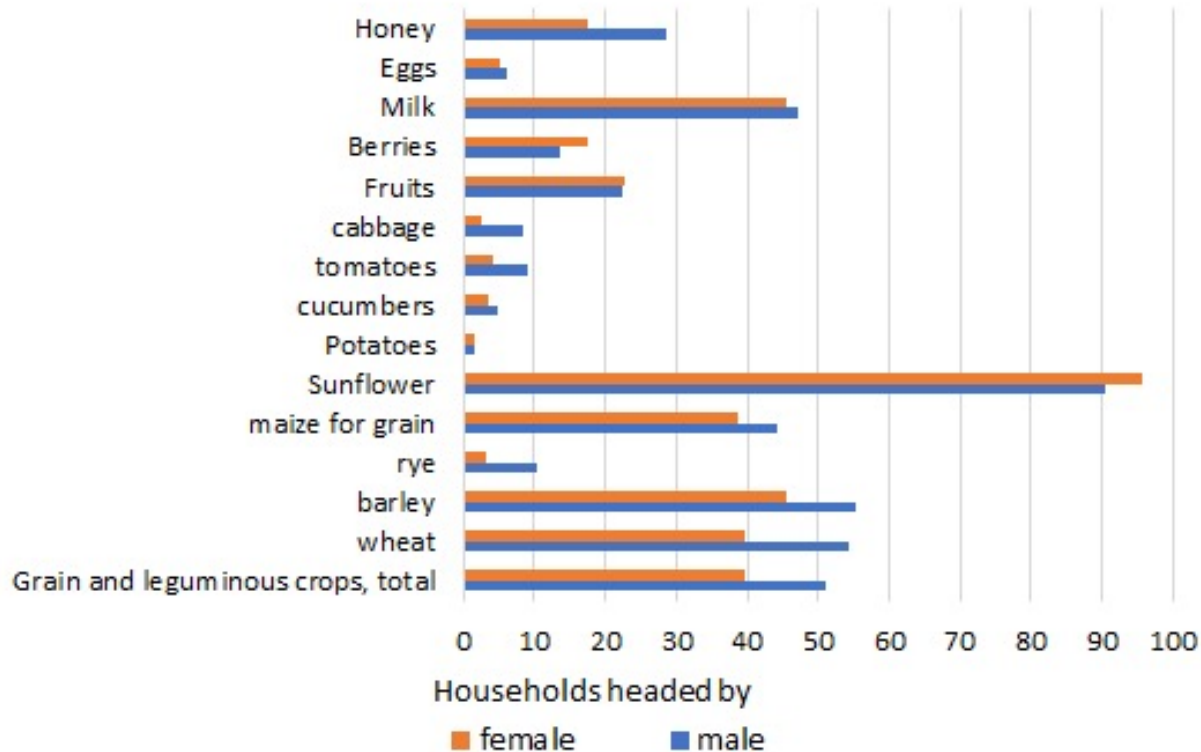
Women are more vulnerable to soil climate change not on the biological determinant, but on the existing system of inequalities.

Women are more vulnerable due to:

- less involved in the decision-making process, so your needs are less taken into account;
- Has lower income (salary was 20% less compare to man, 2020; vertical and horizontal inequality);
- in Ukraine, the share of women in small lands is the same as among men who do not have an income;
- women are responsible for 75% of unpaid housework and care.

# Agriculture – personal peasant farms

Share of agricultural products sold by households, %, 2020



- Male-headed households are larger in terms of agricultural land area and number of animals kept.
- Households headed by female are more dependent on own consumption of grain and leguminous crops, vegetables, milk, egg, honey compare the households headed by male, and has a larger share of sold labor-intensive products as berries.
- Households headed by female has lower yield per ha of the harvested area of vegetables, potatoes, grain crops (except maize for grain)
- In animal husbandry, productivity per capita is higher in female-headed households, but in general household productivity is higher in male-headed households.

Based on data: State Statistics Service of Ukraine, 2021

## "Climate Change and Climate Adaptation" all-Ukrainian survey results:

- Women began to notice manifestations of climate change earlier (10-15 years ago), while men later (5-10 years ago).
- Women are more likely to attribute an increase in infectious diseases, allergies, exacerbations of cardiovascular disease and the emergence of new diseases to climate change
- Women emphasize growth payment for utilities; experience a financial burden from climate change due to increased utilities
- Between 48% and 60% of women experience the consequences for their well-being due to heat, drought, rain or snowfall; climate change affects the increase in infectious and viral, respiratory, cardiovascular diseases.

Source: Зміна клімату та кліматична адаптація: всеукраїнське соціологічне опитування та рекомендовані заходи з адаптації до зміни клімату / Українська кліматична мережа. – Київ, 2021. – 139 с.

Thank you for attention!

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