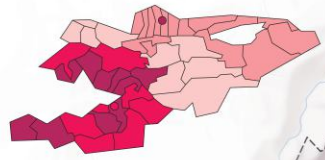


Map of climate change risks and "hot spots" in the Fergana Valley of the Kyrgyz Republic



Climate vulnerability by district

High	Low to medium
Medium to high	Low



Trend of temperature change, °C per 10 years

0.4 to 0.5	0.2 to 0.3
0.3 to 0.4	0.1 to 0.2



Trend of the Standardized Precipitation Evapotranspiration Index

-0.03 to -0.02	0 to 0.01
-0.02 to 0.01	0.01 to 0.02
-0.01 to 0	

Climate change impacts

- The spatial dimension is represented by point symbols
- Changes in snow cover and permafrost, rapid ice melting *
- Elevational shift of alpine biodiversity *
- Desertification (deserts, semi-arid and arid lands expansion)
- Potential extension of arid climate zones by the end of the century (worst case scenario)
- Flow increase and fluctuation
- Torrential rainfalls

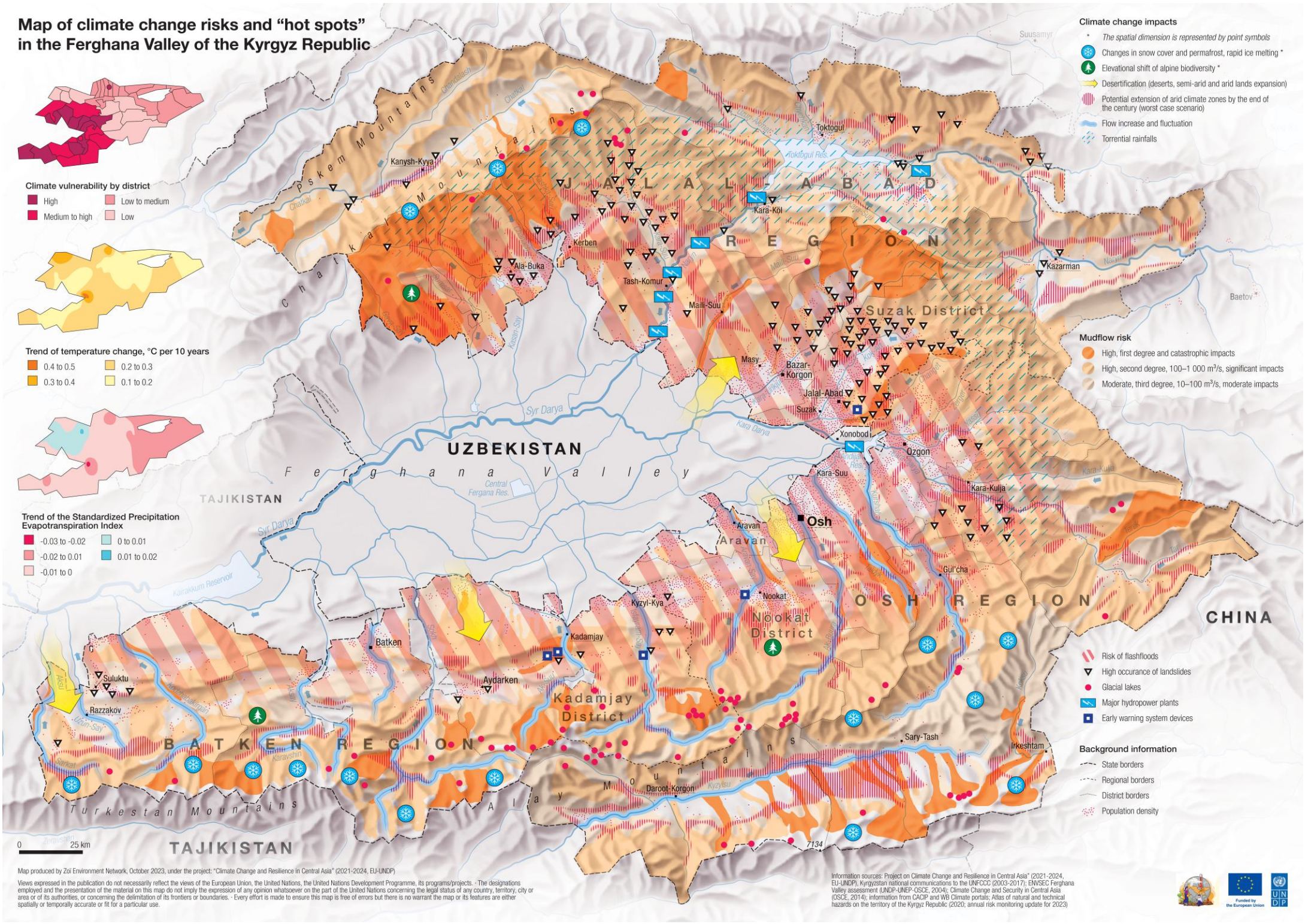
Mudflow risk

- High, first degree and catastrophic impacts
- High, second degree, 100–1 000 m³/s, significant impacts
- Moderate, third degree, 10–100 m³/s, moderate impacts

- Risk of flashfloods
- High occurrence of landslides
- Glacial lakes
- Major hydropower plants
- Early warning system devices

Background information

- State borders
- Regional borders
- District borders
- Population density



0 25 km

Map produced by Zoi Environment Network, October 2023, under the project: "Climate Change and Resilience in Central Asia" (2021-2024, EU-UNDP)

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Information sources: Project on Climate Change and Resilience in Central Asia" (2021-2024, EU-UNDP), Kyrgyzstan national communications to the UNFCCC (2013-2017); ENVSEC Fergana Valley assessment (UNEP-UNEP-OSCE, 2004); Climate Change and Security in Central Asia (OSCE, 2014); information from CACIP and WB Climate portals; Atlas of natural and technical hazards on the territory of the Kyrgyz Republic (2020); annual risk monitoring update for 2023

