Why should **drought risk** be integrated into Sweden's climate change preparedness **policies**?

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This study advocates for incorporating **drought risk assessments** into the local and national preparedness for climate change as part of the **Swedish National Strategy for Climate Change Adaptation**

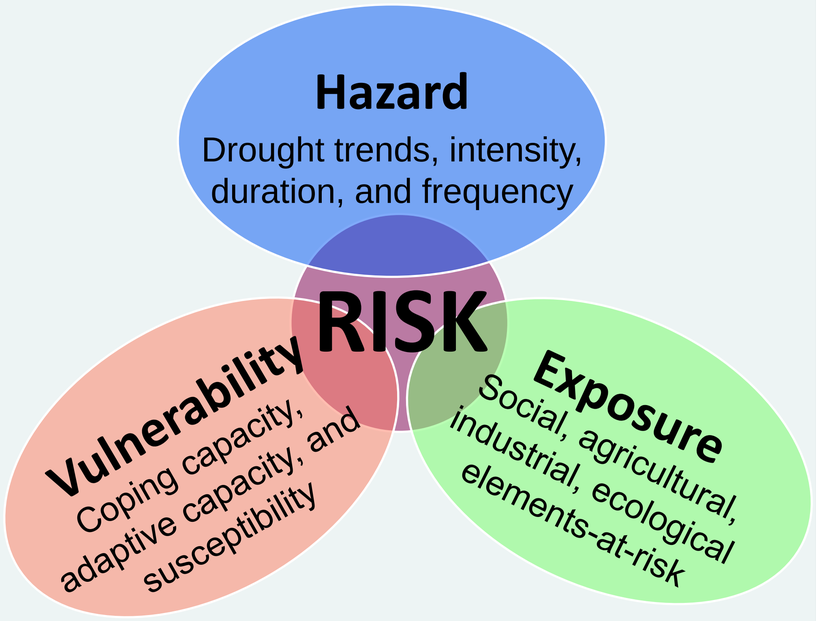

Fig 1. Framework of the current Drought Risk Assessment in Sweden

Aim:

This study aims to introduce a foundational framework for **drought risk assessment** in Sweden supporting different actors at all levels in society, from local to national, while promoting the implementation of the Swedish national policies on climate change adaptation.

Research focus:

1) the development of a drought risk assessment in Sweden,
2) the identification of priority hotspots for targeted drought management measures,
3) and the identification of areas for improvement in drought-related policies.

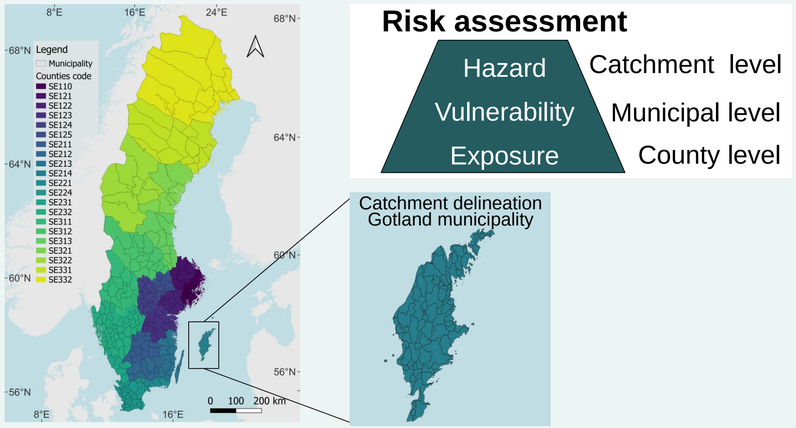

Fig 2. Drought risk assessment in Sweden for about 40 000 catchments (hazard analysis), 290 municipalities (vulnerability analysis), and 21 counties (exposure analysis) from January 1975 to December 2021.

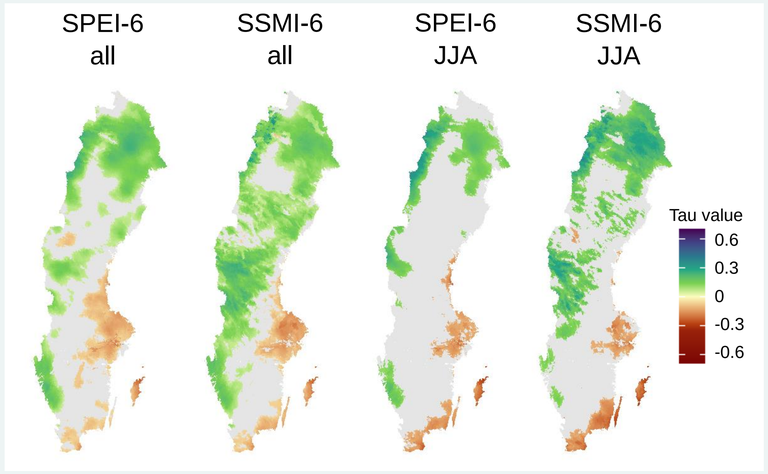

Fig 3. Trends of the Standardized Precipitation-Evapotranspiration Index (SPEI) and Standardized Soil Moisture Index (SSMI) at a timescale of 6 months. A positive tau value indicates an increasing trend, while a negative value signifies a decreasing trend.

Results and recommendations

Our findings show drier conditions and an increasing frequency of droughts in Southeastern Sweden. These findings stress the need for strengthen the current national policies on drought risk management.

The Swedish National Strategy for Climate Change Adaptation should prioritize instructing drought risk assessments at both municipal and national levels.

PhD Claudia Canedo Rosso is currently assessing drought risk and drought impacts in the Nordic Countries.

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