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## Potential of peatland restoration in Germany – a nationwide landscape analysis

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Peatland restoration projects are important to mitigate climate change, loss of biodiversity and sustain and develop ecosystem services of peatlands. National and global strategies which address the effects of peatlands on climate change and nature conservation as well as the social and economic compatibility of peatland restoration projects are needed. The regional focus of these strategies is crucial for prospective restoration projects as well as for the measurements used to identify regions with high potential for realisation of peatland restoration along with sufficient impact on GHG reduction and nature conservation.

Therefore, we aim to identify regions in Germany in which the potential of realisation of restoration projects is high. Further, we identify important restrictions at regional scale which hinder potential peatland restoration projects.

We assembled a set of regional indicators and analysed the available GIS-data on the nationwide scale of Germany. Indicators comprise natural (e.g. precipitation surplus), legislative (e.g. protected and priority areas) and economic (e.g. land use, marginal return) conditions. Each identified indicator was categorised based on its relevance for the feasibility of implementing peatland restoration projects. Using landscape structure analyses, regions throughout Germany with good prospective for the realisation of peatland restoration projects were identified. These highlighted regions show high potential for optimising and/ or maximising the ecosystem services of peatlands. To characterise the region based on the indicators used, short profiles were created for each resulting region. We recommend to take the analysing method and these highlighted regions into account when developing nationwide strategies for peatland management in Germany.