

Copernicus Institute of Sustainable Development





Environmental impacts of biomass feedstock production

A spatiotemporal study of environmental impacts caused by changes in land use and management in Europe, driven by the growing demand for bio-based products

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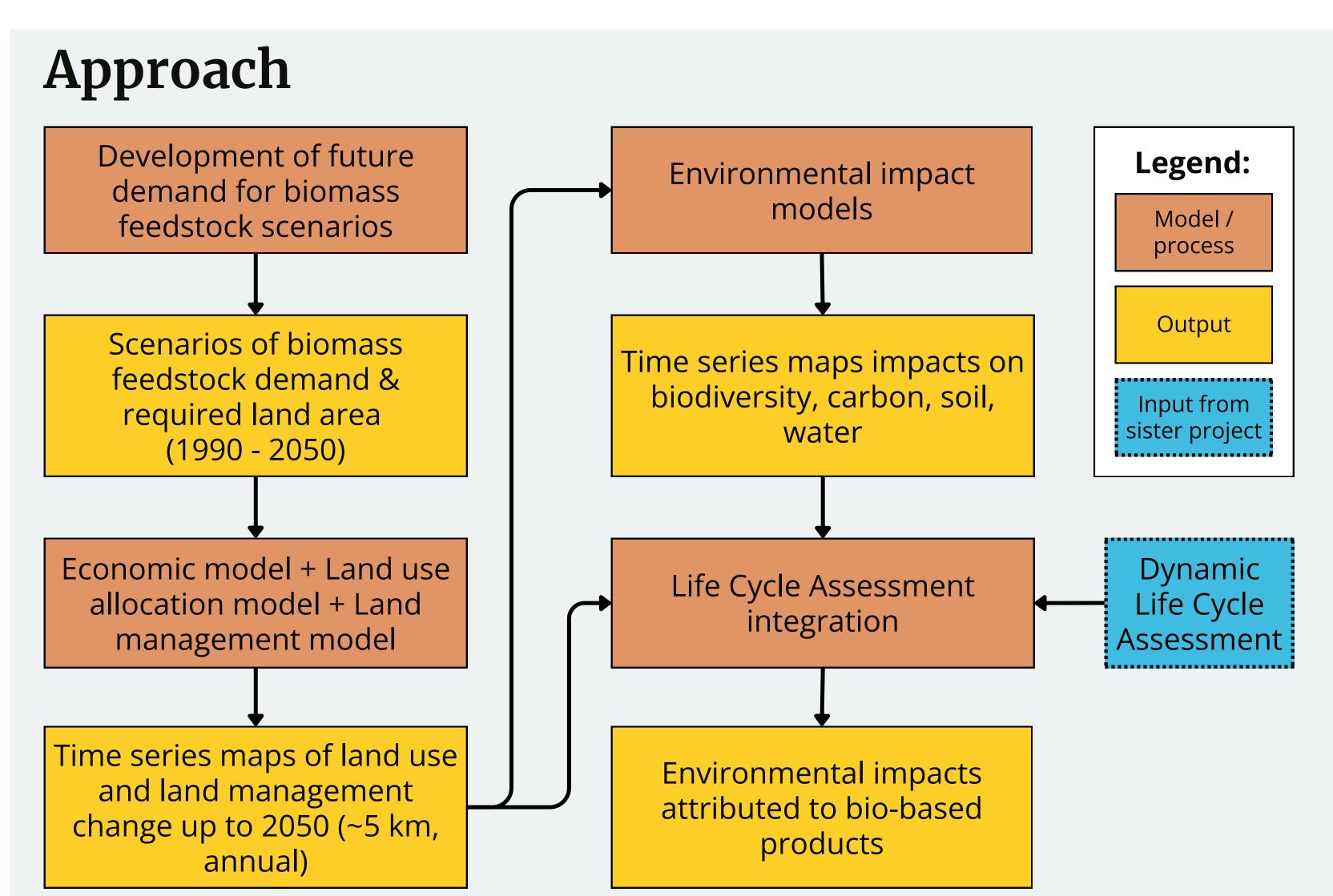


Rationale & Aim

Growing demand of biomass feedstock for biobased products results in changes in land use and land management. These changes have significant impacts on the environment. Identifying regions and periods sensitive to impacts is crucial.

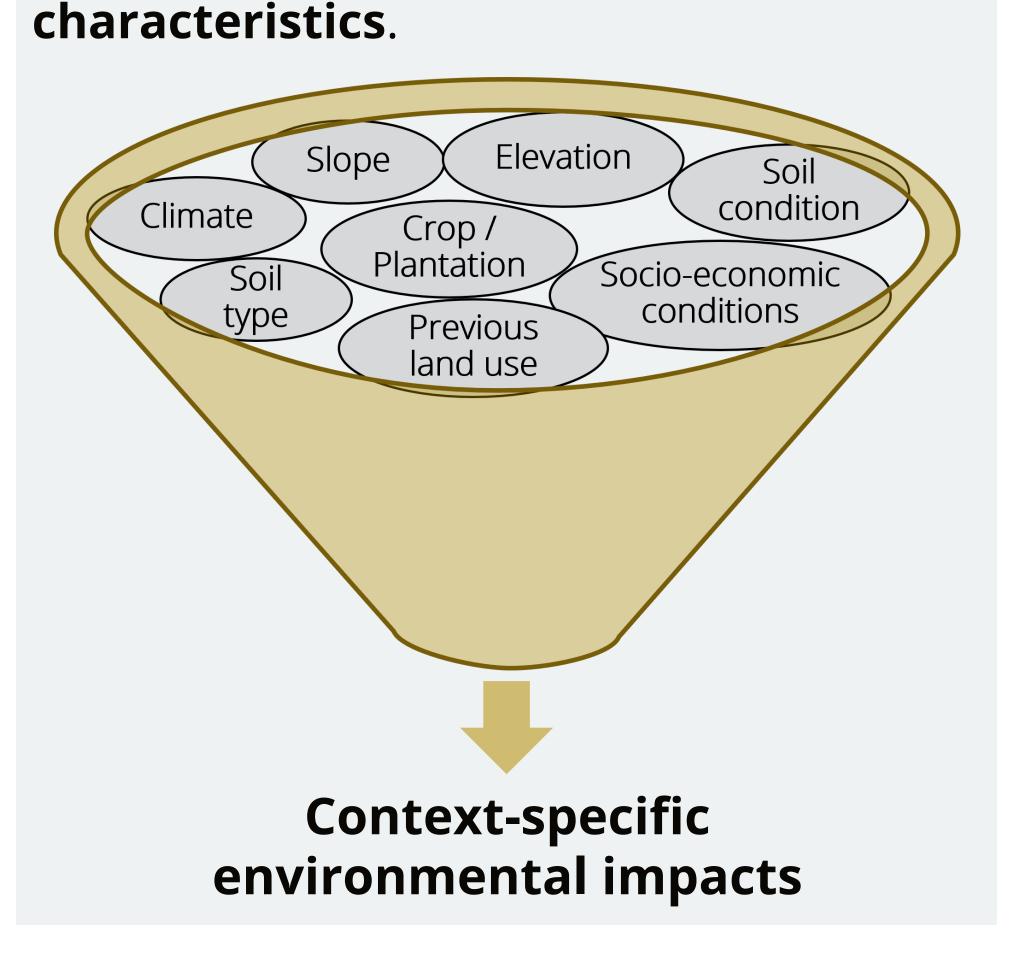
Aim: To quantify the projected environmental impacts of land use and land management changes resulting from the growing demand for biomass feedstock, and attribute impacts to bio-based products.

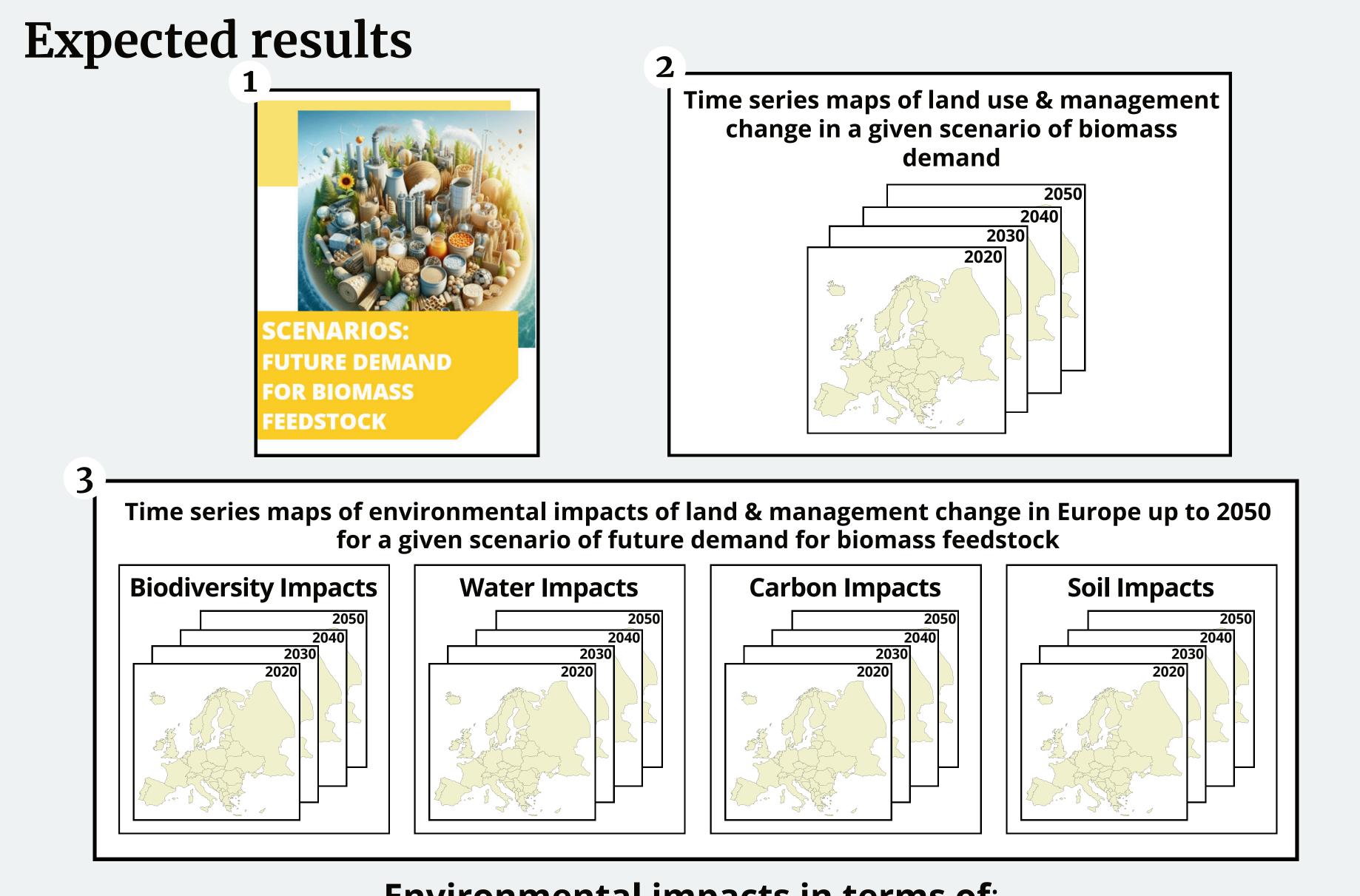
Scope: Biomass feedstock sourced from agriculture and forestry in Europe.



Local factors influencing impacts

Environmental impacts of land use & management changes vary depending on local factors like feedstock type, socioeconomic conditions, and biophysical





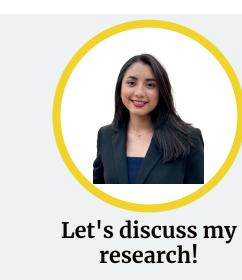
Environmental impacts in terms of:

Quantity of land use change, type of land transformation, type of land management, type of crop / plantation, type of bio-based product ... in place 'x' and time 'y'.

Join the discussion:



- 1. Land management models for biomass feedstock production
- 2. Data requirements and practicalities for integrating spatiotemporal variations in life cycle assessments







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