Nature-Based Solutions for tackling droughts and floods in rural areas: Spatial indicators of NBS efficiency at landscape-scale.

LISAH

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Your role

Exhaustive **review** of the literature on quantitative and spatial methods for water conservation/drainage impact at landscape scale

Conceptualization of landscape **infrastructures scoring** for water conservation/drainage at hillslope scale

Context

Climate change is exacerbating extreme droughts and floods. Rural areas, particularly agricultural areas, are highly vulnerable to these changes, even in so-called temperate climates. Nature-based solutions (NBS) to reduce the vulnerability of these areas are increasingly being promoted. This solution may be landscape infrastructures located at plot border. However, these solutions are **rarely considered jointly for both drought and flood mitigation,** and assessment of any solution efficiency is still local.

Issues

Efficiency assessment of **landscape blue-green infrastructures (NBS)** for drought and flood mitigation (water conservation and drainage) should integrate their location within a landscape and topological system.

Expected results

Starting from the BV-Service concept [Lagacherie et al 2016] and exhaustive international litterature, you will conceptualize, develop and test a scoring system for each NBS mitigation efficiency taking account of the spatial dependencies for any **3D landscape**.

Inter•disciplinary team

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