





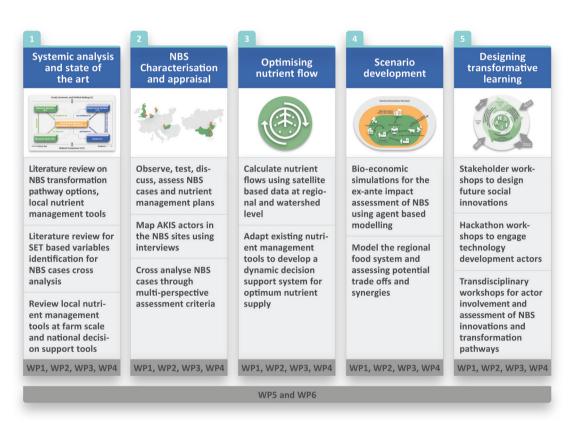
Today's agriculture is highly dependent on external nutrient inputs, and in particular mineral fertilisers supplying nitrogen (N), phosphorus (P), potassium, and other elements, which are indispensable components of many intensive farming systems.

trans4num's ambition is to substantiate and broadly promote the nature-based solutions (NBS) approach for sustainable agricultural practices in Europe and China, focusing on nutrient management (bio-based nutrient sources, sustainable crop rotation, integrated pest management).



## **HOW**

tran4num methodological roadmap



# **OBJECTIVE**

to develop and test innovative NBS practices and pathways that contribute to a socio-ecological transformation of existing intensive agriculture systems towards increasingly sustainable nutrient management.



To study NBS with a multi-level, multi-actor approach, trans4num has selected four European and three Chinese sites.





- Crop rotation and Bio Based fertilisers
- Legumes, spoon-feeding, mixed/inter/strip-cropping, agro-forestry
- Biomass crops, biobased fertilisers, crop rotations
- Crop rotation (large trial), biomass crops, farmyard manure
- Reduced fertilizer, reduced chemical fertilizer, crop rotation and bio-fertilizer

### **Outputs**

# WHAT

### **Outcomes**



NBS practices



nutrient budget methodologies



for improved nutrient management



to stakeholders on all levels



international cooperation



transformation pathways



nutrient flows



opportunities for NBS































