

**Mentor**

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**Your role**

Exhaustive **review** of the literature  
Database surveys and **interviews** for stakeholder maintenance practices and infrastructures perception (France-Tunisia-India)  
Framework conceptualization for infrastructures efficiency **Evaluation** at hillslope scale

**Inter•disciplinary team**



**Jean-Stéphane BAILLY**  
*Hydrology*  
*Data science*  
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*Landscape agronomy*  
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*Landscape ecology*  
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# Agrohydrological infrastructures management for Water conservation



## Context

**Water** shapes the soil and influence the growth of crops and animals. Farming practices act on water resources to manage its positive and negative effects on productions and other resources.

**Climate change** impacts water availability, and so the agricultural systems. The landscape is the most suited level to tackle the changes in water management for farming activities.

## Issues

The **agrohydrological blue-green infrastructures** may play an important role for water conservation. But their efficiency are fully dependent on the maintenance practices frequency and magnitude.

## Expected results

Terraces are an emblematic example of infrastructures. You will add international knowledge on agrohydrological infrastructures management strategies over **scientometric analysis** of the literature.

## Bibliography

Nassauer JI, Opdam P (2008) Design in science: extending the landscape ecology paradigm. *Landscape Ecol* 23:633–644.  
Rizzo et al. (2013) Farming systems designing landscapes. *Danish Journal of Geography* 113:71–86.  
Scherr et al. (2012) From climate-smart agriculture to climate-smart landscapes. *Agric & Food Secur* 1:1–35.

