

# Can We Sustain Services from Cropping Systems Facing Drought?

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## 1. CHALLENGES



9.7 billion people in 2050  
Food production 60-70% ↑



Sustainable intensification  
Organic farming as solution?



Drought  
Frequency and severity ↑

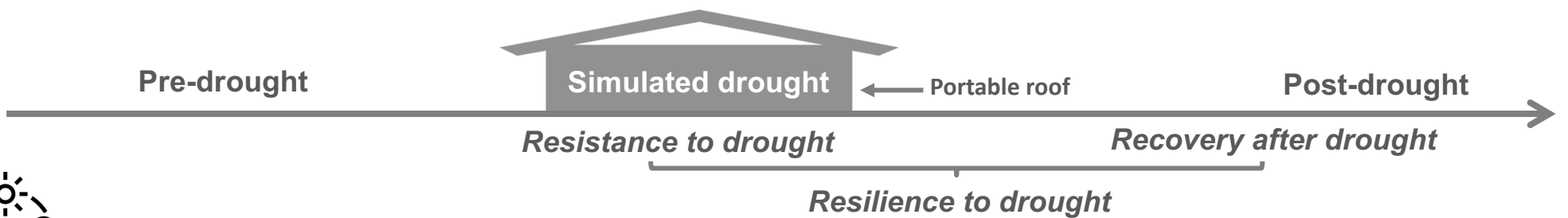


Ecosystem services  
provision

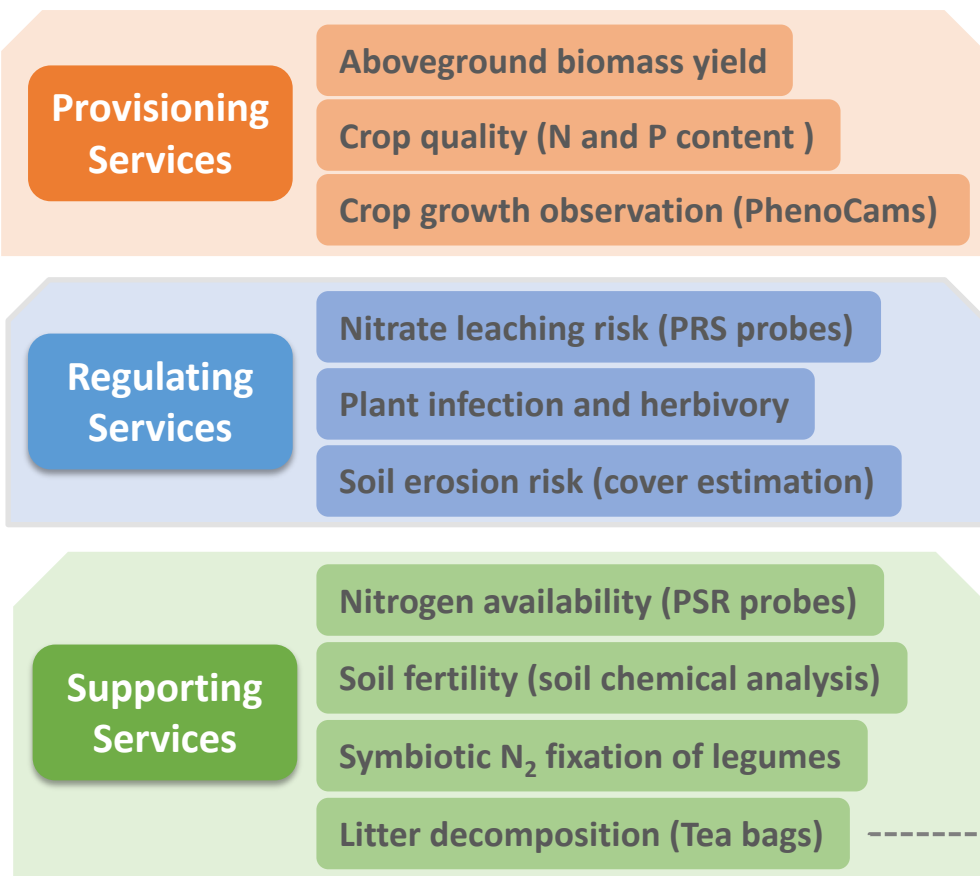


## 2. PROJECT (RELOAD)

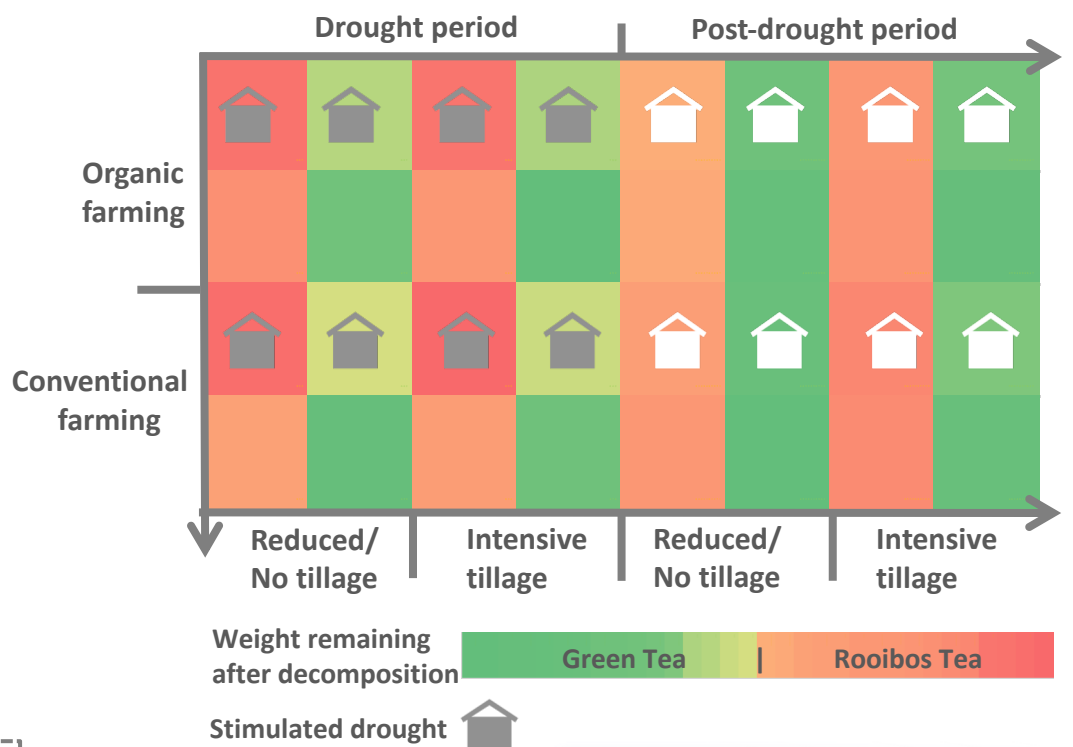
Cropping systems providing ecosystem services during and after drought



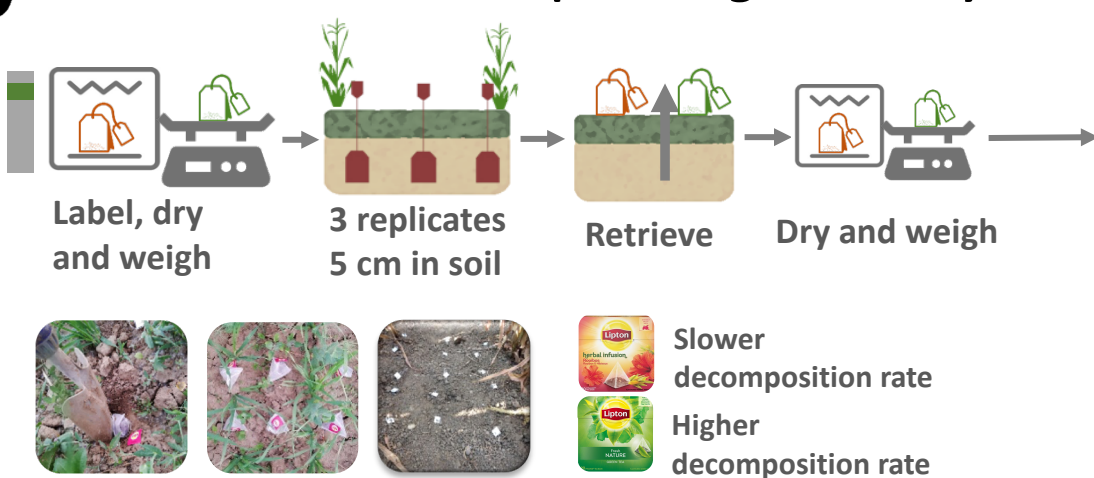
## 3. ECOSYSTEM SERVICES



## 4. EXPERIMENTAL DESIGN



## 5. DECOMPOSITION (Tea Bag Method)



## 6. RESULTS

- Drought reduced decomposition by 34%
- Decomposition during drought was lowest in the organic with intensive tillage system
- After drought, decomposition was 5% higher in ex-drought than control plots