

Setting the scene for carbon farming: best practices and challenges:

Developping C farming schemes in a soil health perspective

Claire Chenu

INRAE, claire.chenu@inrae.fr

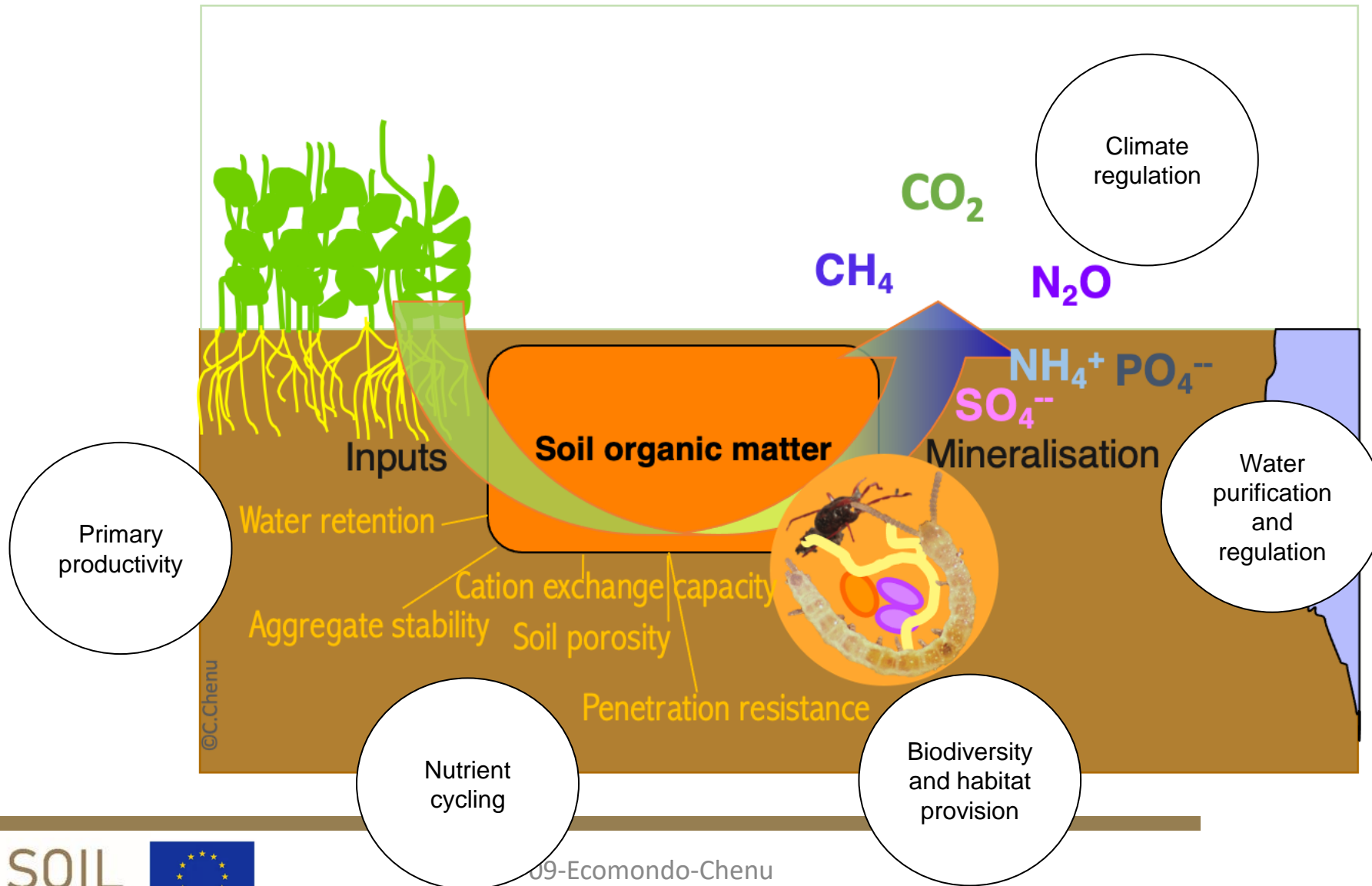


EJP SOIL
European Joint Programme

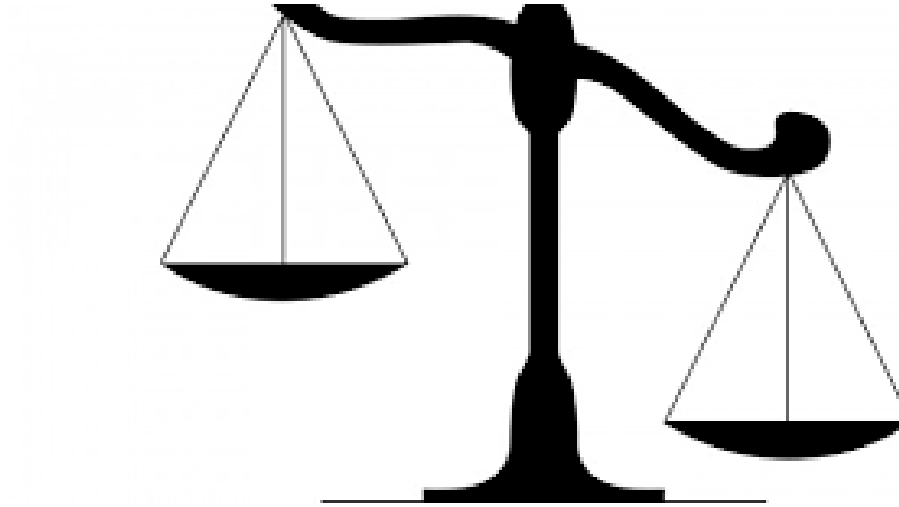
EJP SOIL has received
funding from the European
Union's Horizon 2020
research and innovation
programme; Grant
agreement No 862695



Why ? Soil organic matter is key to soil quality and soil health



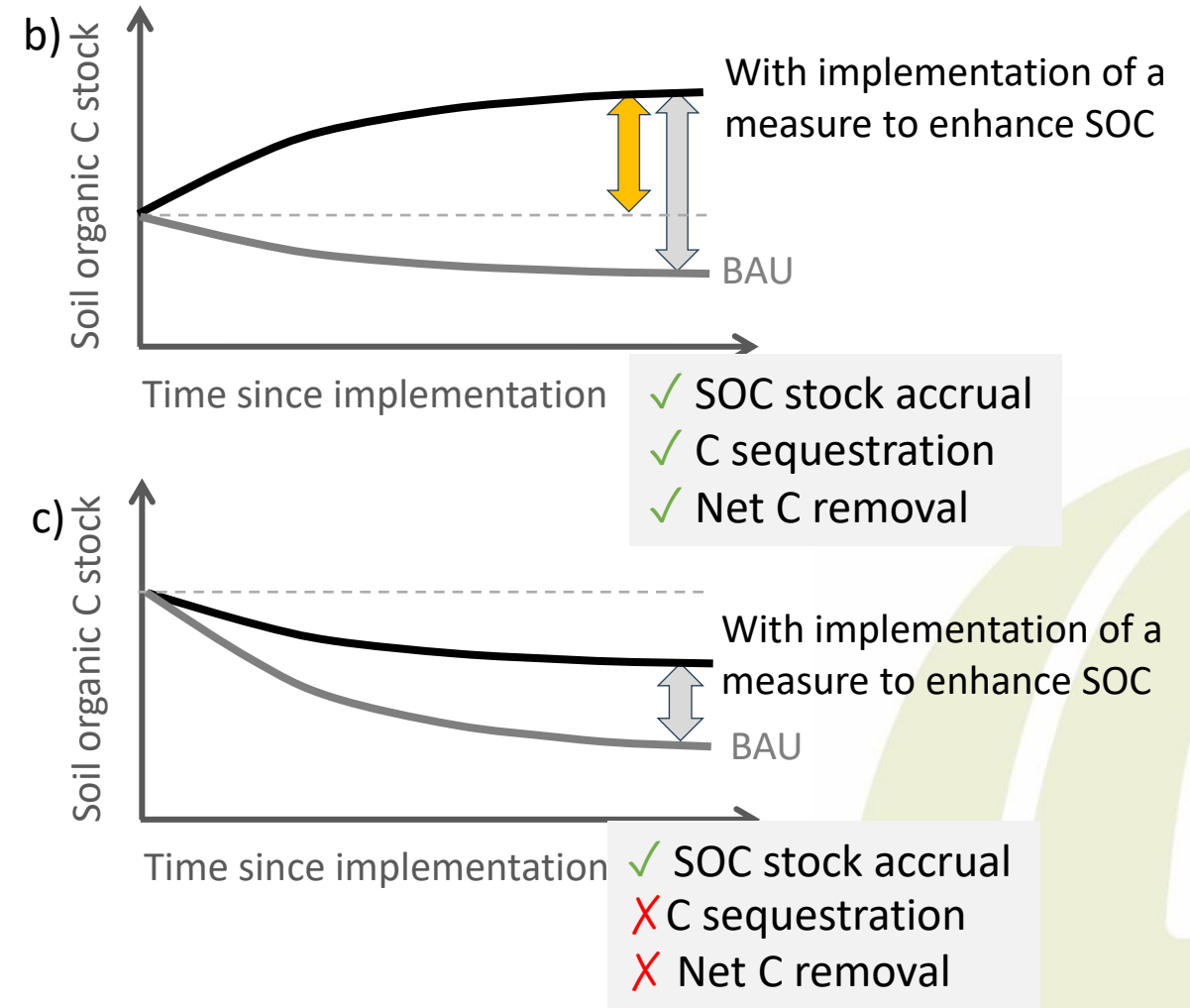
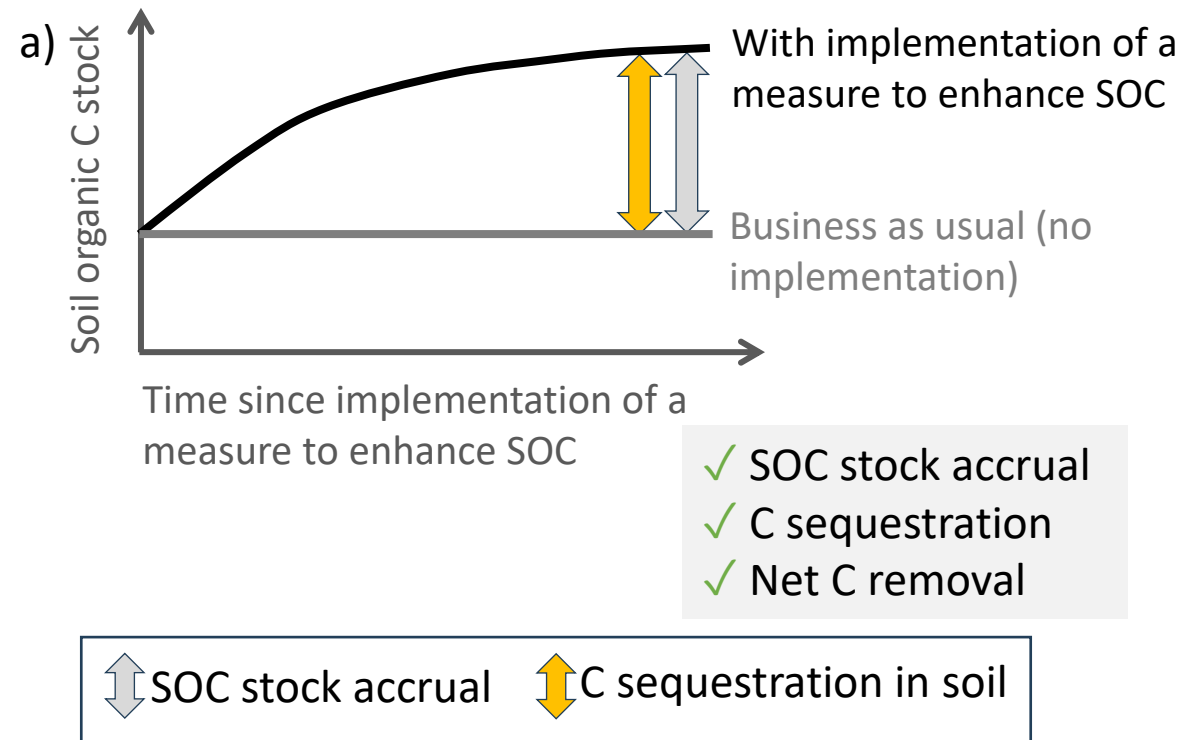
What does it mean? A wider perspective than soil C



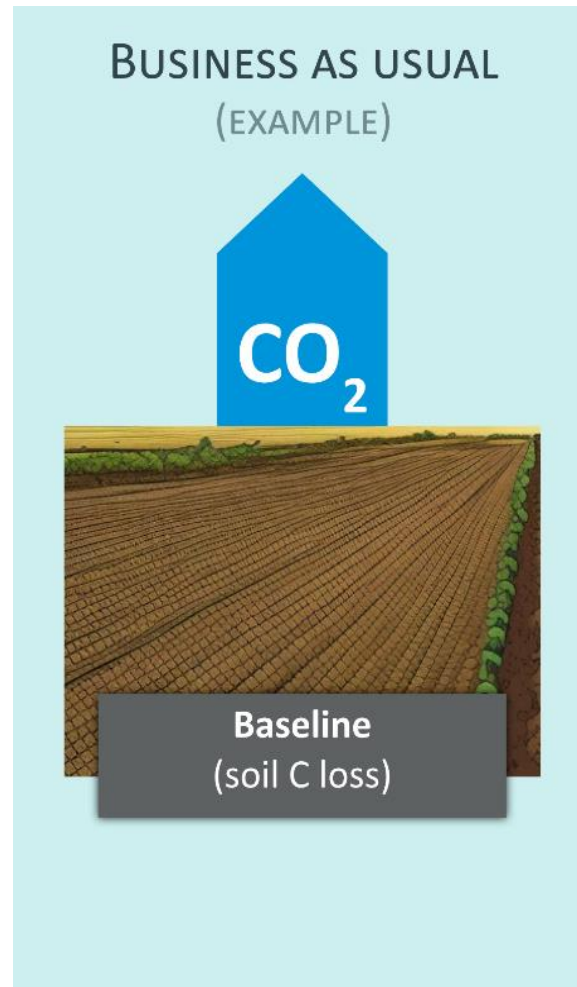
Accounting for synergies and trade-offs

Expected outcome?

More Soil Organic Carbon for GHG mitigation & for soil health improvement



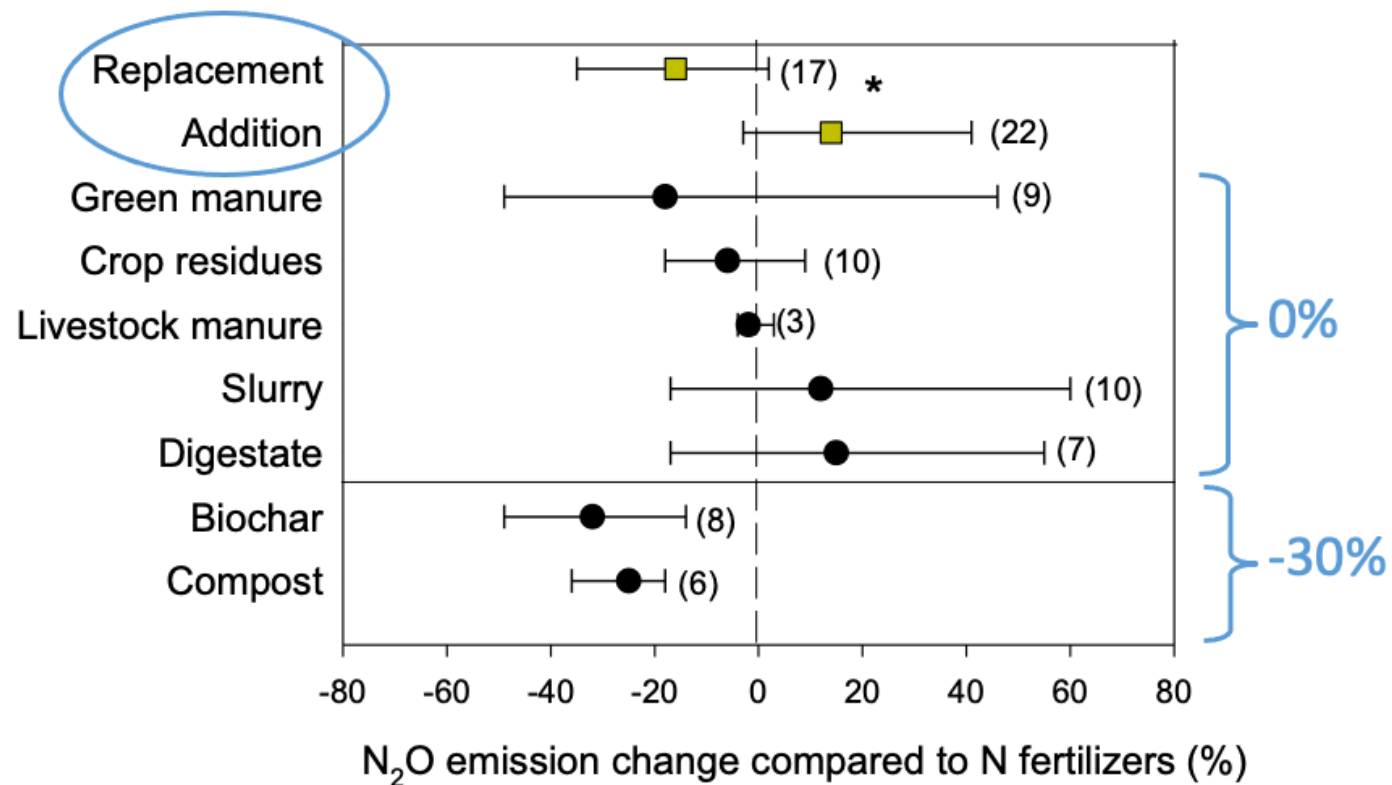
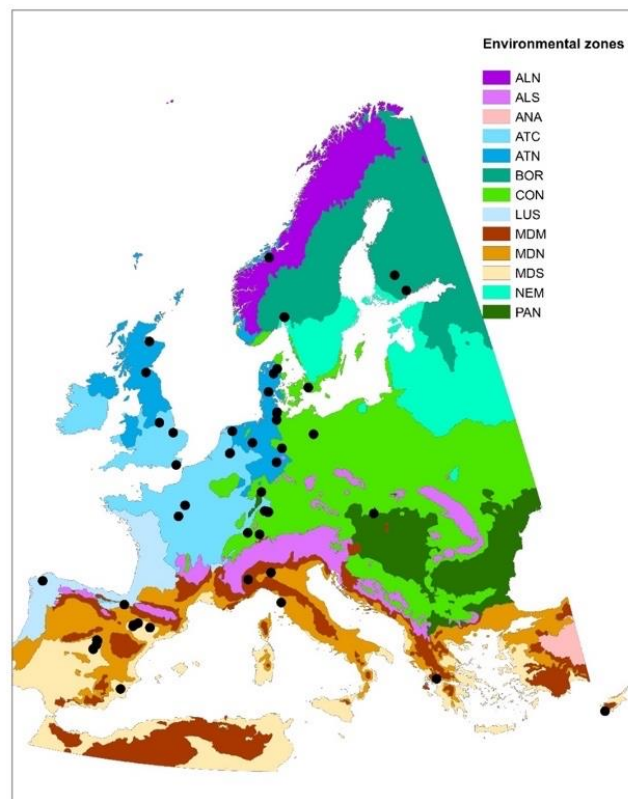
Expected outcome: C sequestration or only C loss mitigation?



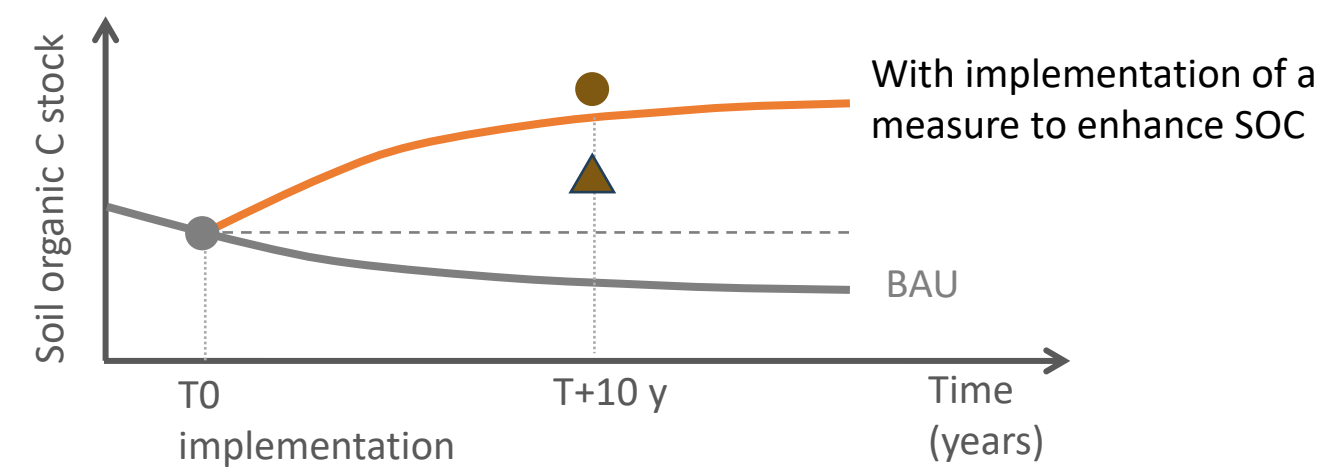
Trade-offs ?

N₂O emissions

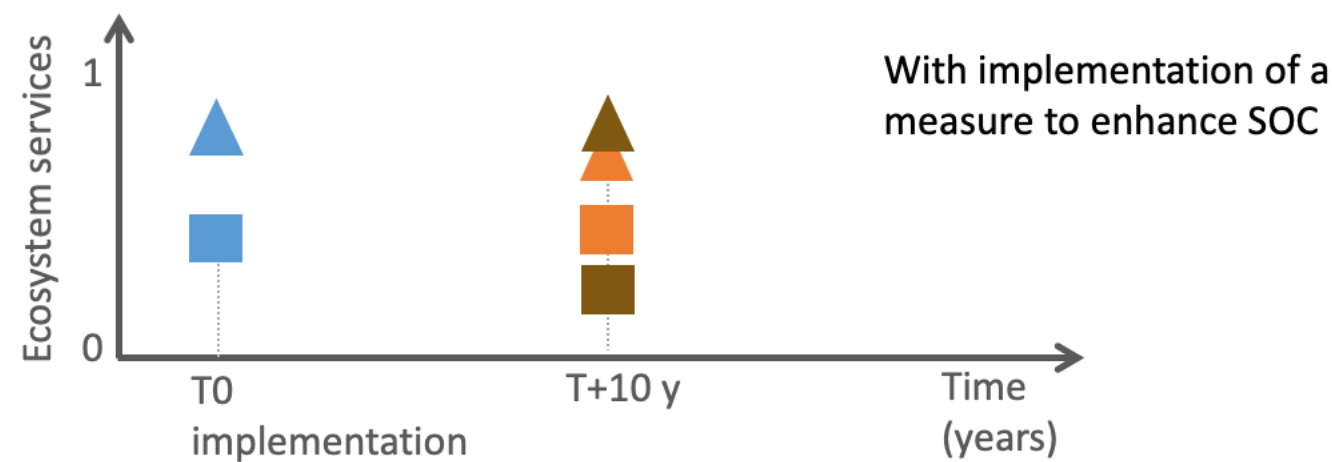
Organic amendments vs mineral fertilizers



Measuring, reporting and verifying



Modelling to predict
Measuring to verify



Conclusion: developing C farming in a soil health perspective?

Desirable, challenging, possible

The way forward : combining at best

Knowledge on the effect of (practices x pedoclimatic conditions) on SOC, GHG, ecosystem services

Modelling to predict SOC, GHG, ecosystem services

Measuring SOC, GHG, soil health indicators

