

Farms For Future: building tomorrow's agriculture

Agro-ecological systems, a holistic approach of farming from field to plate, offer new perspectives to explore and to develop the autonomy and resilience of agro-ecosystems.

Through a trans-disciplinary approach, the project Farms For Future aims at exploring synergies and potential conflicts resulting from the application of agro-ecological practices.



Fanny Boeraeve
PhD Student
f.boeraeve@ulg.ac.be

Agricultural systems

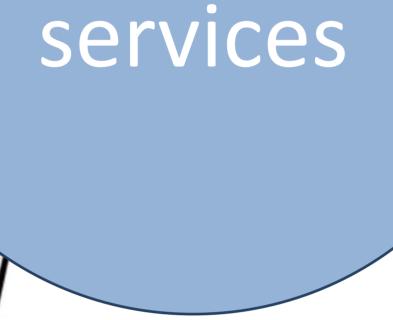
This whole-system study investigates multiple interactions simultaneously through a social and a biophysical valuation of ecosystem services in agroecological farms.

Landscapes

Laura Maebe Research Assistant laura.maebe@ulg.ac.be



Ecosystem services are assessed socially and biophysically across different scenarios of land consolidation plan in order to enhance the multifunctionality of agricultural landscape.



Functional

Biodiversity

Watershed scale

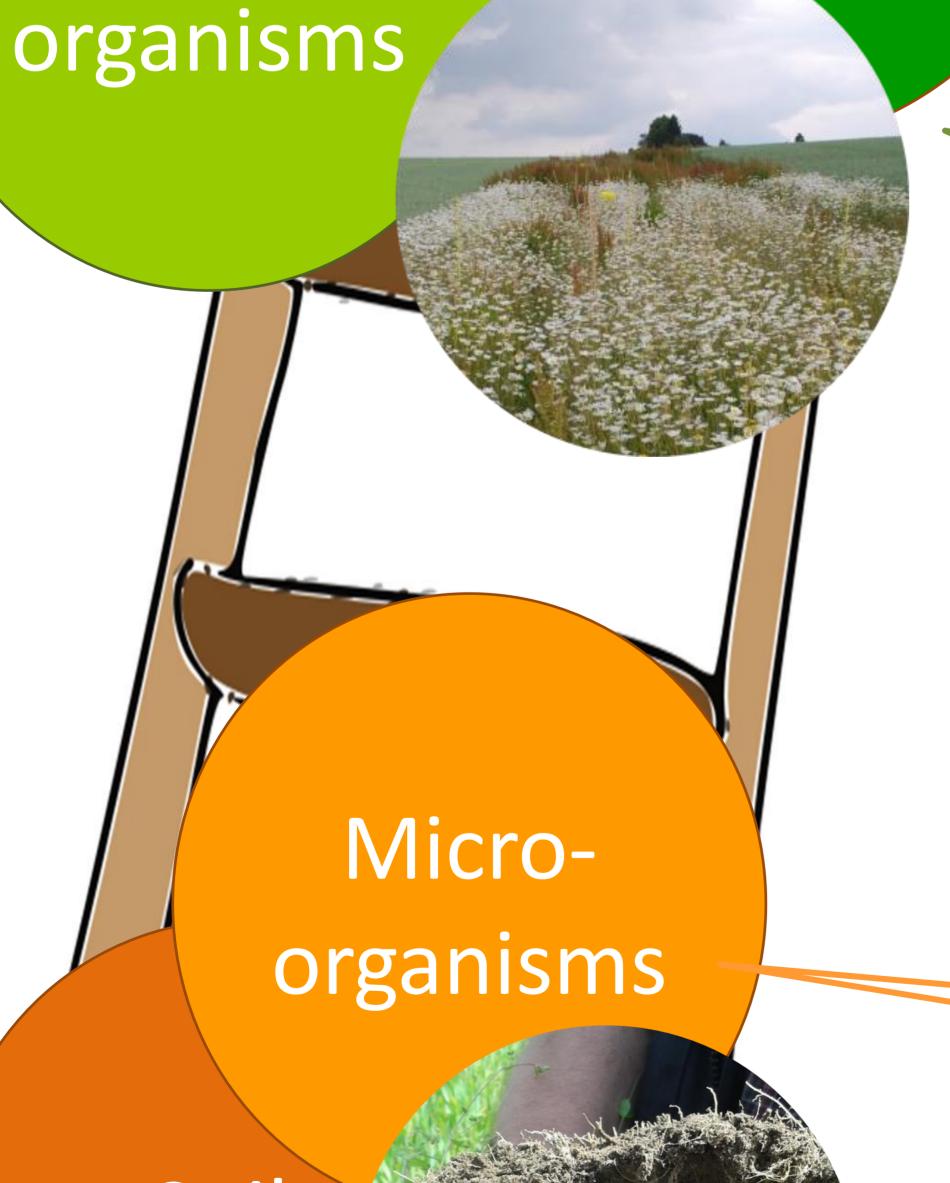
Erosion is one of the 8 soils threats identified by the EU. This project aims to better understand these sediments fluxes and in this way, to be able to better predict it. These predictions are essential to size mitigation measures, avoiding social disaster.



Nathalie Pineux
PhD Student
nathalie.pineux@ulg.ac.be



Vincent Cantreul
PhD Student
vincent.cantreul@ulg.ac.be



Macro-

Ecological infrastructures & farm plots

We study the impact of new agricultural habitats, such as biodiversity support schemes (flower strips, beetle banks), on the diversity of both plants and arthropods species and their functional traits linked to ecosystem services (pollination, pest control).



Emilie Pecheur PhD Student epecheur@ulg.ac.be



Roel Uyttenbroeck
PhD Student
roel.uyttenbroeck@ulg.ac.be

Soils & micro-organisms



Florine Degrune
PhD Student
Florine.degrune@ulg.ac.be

We assess the ecological and agronomical performance of agroecology-based farming systems by evaluating the soil quality in terms of microbial community structure, chemical fertility and organic matter dynamic.

Actors of the project: Biodiversity & Landscape: Marc Dufrêne, Arnaud Monty, Jan Bogaert, Grégory Mahy; Exchanges Water-Soil-Plants: Jean-Thomas Cornelis, Aurore Degré; Modelling & Development: Thomas Dogot;

Engineering of animal productions: Jérôme Bindelle, Yves Beckers; Socio-Economy, Environment, Development: Pierre Stassart (Ulg)