

THREE ASPECTS, ONE CONCEPT: AGROECOLOGY
Agroecological practices and human interactions for a new approach for science
An example at the University of Liège

Séverin HATT¹, Sidonie ARTRU¹, Fanny BOERAEVE², David BREDART¹, Bernard BODSON³, Marc DUFRÉNE², Frédéric FRANCIS⁴, Ludivine LASSOIS⁵, Arnaud MONTY², Pierre STASSART⁶, Eric HAUBRUGE⁴

¹ AgricultureIsLife.be (ULg, Gembloux Agro-Biotech, Belgium) ; ² Biodiversity and Landscape Unit (ULg, Gembloux Agro-Biotech, Belgium) ; ³ Crop Science Unit and Experimental Farm (ULg, Gembloux Agro-Biotech, Belgium); ⁴ Functional and Evolutionary Entomology Unit (ULg, Gembloux Agro-Biotech, Belgium); ⁵ Forest, Nature and Landscape Department (ULg, Gembloux Agro-Biotech, Belgium); ⁶ Socio-economy, Ecology and Development Unit (ULg, Campus of Arlon, Belgium)

Contacts: Séverin HATT (severin.hatt@ulg.ac.be); Sidonie ARTRU (sidonie.artru@ulg.ac.be); David BREDART (dbredart@ulg.ac.be); Fanny BOERAEVE (f.boeraeve@ulg.ac.be)

Abstract

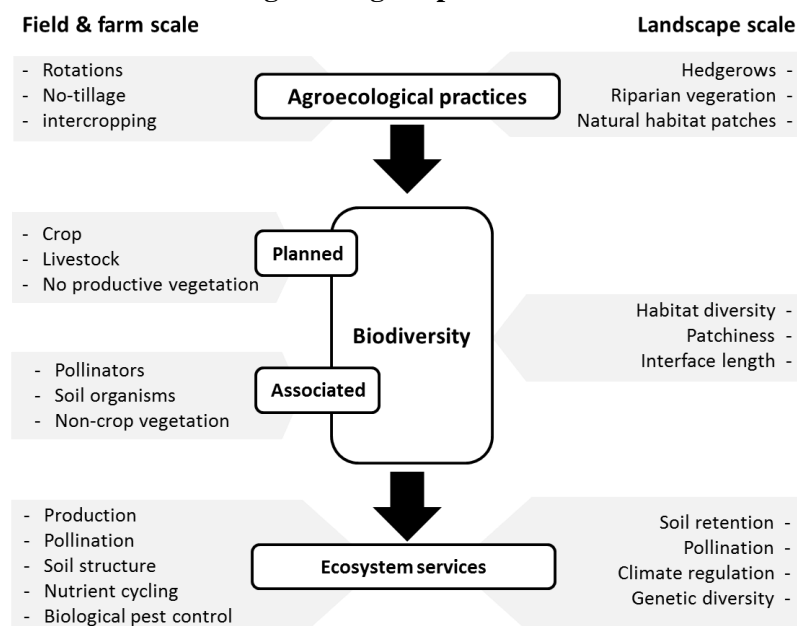
Critics are raising about conventional farming and its consequences on biodiversity, human health and society. As alternatives, novel models for agriculture are proposed, and among them Agroecology.

Quite often, Agroecology is seen as the application of ecological knowledge to the agricultural production. Indeed, this helps to develop more ecological farming practices favoring biodiversity to provide ecosystem services at multiple scales. Agroecology goes further in considering that the agricultural production is integrated in a food system guided by human interactions. This latter one takes into account socio-economic and political dimensions to develop new production systems. Doing so, it assures food security worldwide while preserving resources for future generations. Facing these ambitious objectives, academics are invited to elaborate a new approach for science in developing participatory and action-oriented approaches as well as multidisciplinary.

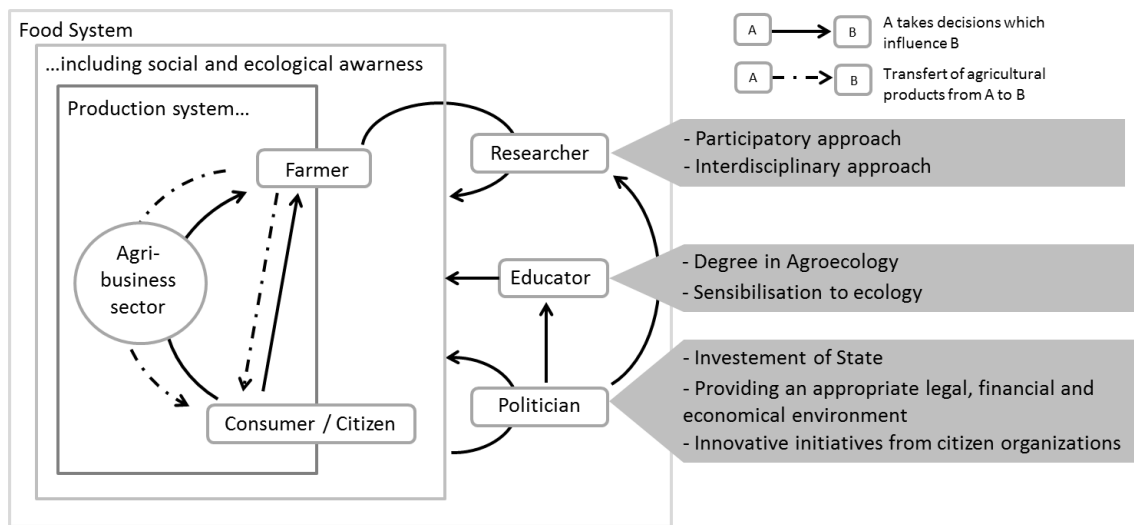
AgricultureIsLife is a research platform built up at the University of Liège (ULg). In 2013, 40 researchers (including 18 young researchers) from 16 research units of ULg were working in a multidisciplinary approach. About twenty research topics have been divided in four research axes of which objectives are to develop a more sustainable agriculture. The platform has the ambition to discuss its results to a large comity gathering the actors of the agricultural development.

The aim of our work is firstly to present Agroecology as a concept made of three interrelated aspects. To illustrate it, the organization and objectives of the research platform AgricultureIsLife will be discussed in a second part.

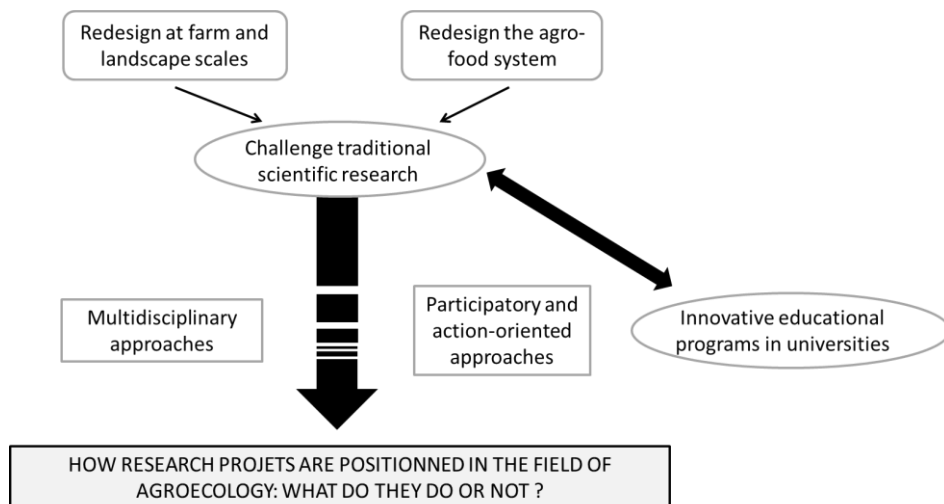
I. Biodiversity, the cornerstone for agroecological practices



II. An up-scaled system based on human interactions



III. A new approach for science



IV. AgricultureIsLife, an agroecological platform?

