

### The virtual university of agroecology project

Thierry Doré, Sylvain Plantureux, May Balabane, Guy Richard

#### ▶ To cite this version:

Thierry Doré, Sylvain Plantureux, May Balabane, Guy Richard. The virtual university of agroecology project. International symposium on agroecology and food and nutrition security, Sep 2014, Rome, Italy. hal-01357027

### HAL Id: hal-01357027 https://agroparistech.hal.science/hal-01357027

Submitted on 29 Aug 2016

HAL is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers. L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.























Thierry DORÉ<sup>(1)</sup>, Sylvain PLANTUREUX<sup>(2)</sup>, May BALABANE<sup>(3)</sup> and Guy RICHARD<sup>(4)</sup>

(1) AgroParisTech, 16 rue Claude Bernard, 75231 Paris Cedex 05, France - thierry.dore@agroparistech.fr (2) Université de Lorraine - Inra - Ensaia, UMR Agronomie et Environnement, 2 avenue de la forêt de Haye, 54518 Vandoeuvre, France - sylvain.plantureux@univ-lorraine.fr (3) Inra, Département Environnement et Agronomie, UR 251, RD 10, 78026 Versailles, France - may.balabane@versailles.inra.fr (4) Inra, Département Environnement et Agronomie, 2163 avenue de la Pomme de Pin, 45075 Orléans, France - guy.richard@orleans.inra.fr

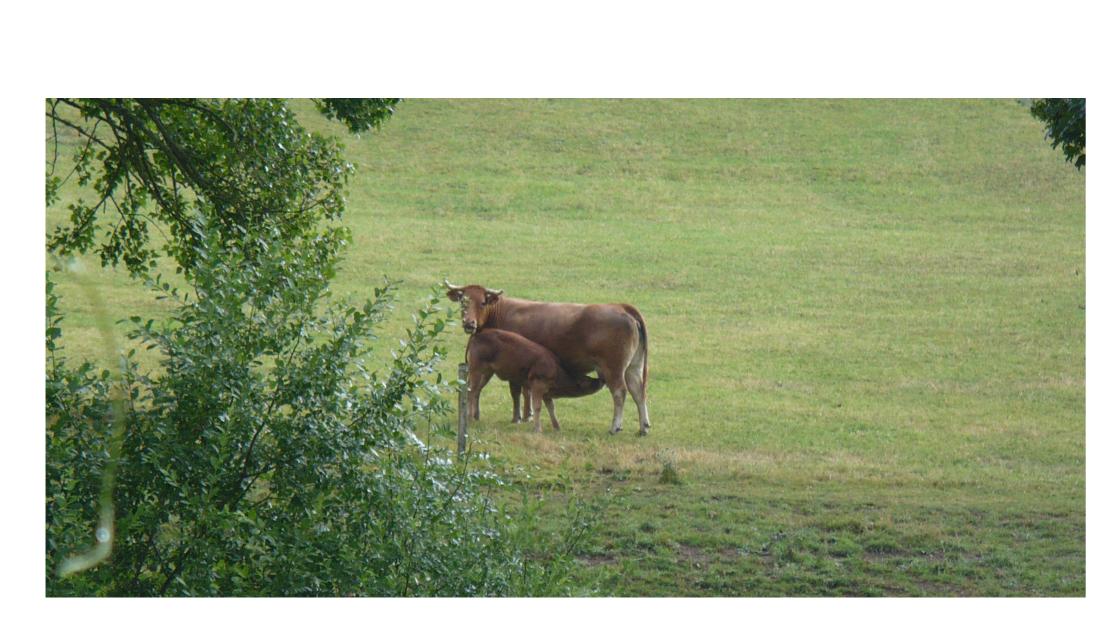
## Context and stakes

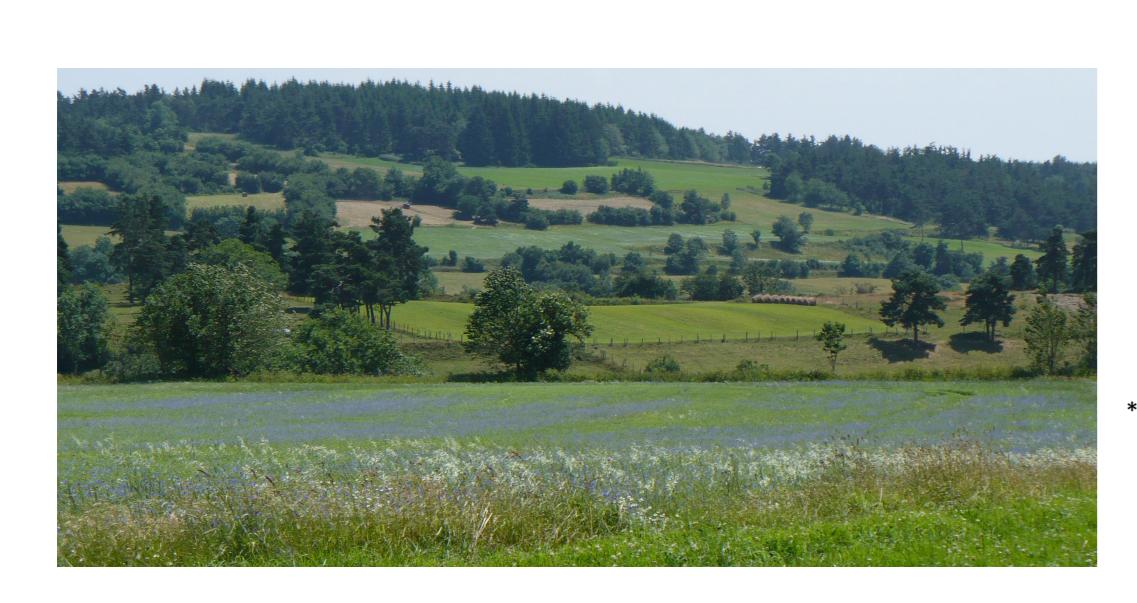
New dynamics of agriculture is needed to face multidimensional challenges such as food security, climate change or environment protection. This implies changes in the way to analyze functioning of agroecosystems and to design agricultural systems. Improving the use of biological interactions is necessary. Agroecology is hence a priority of research and higher education institutions, as well as of national and international policies. In this context a consortium of French public research and higher education institutions in agronomy considered continuing training directed towards their own staff as an essential lever alongside specific recruitments. They decided to build up the project of Virtual University for Agroecology.

# **Objectives and plan**

UVAE is a distance learning, french speaking, facility which aims to allow staff in agricultural research and higher education institutions to acquire or perfect their knowledge and skills in agroecology. It can also be used for students training at master level. Its design combines an introductory module, delivered in 2014, and three-types modules, in progress. The introductory module enables learners to familiarise themselves with the diverse positioning of the agricultural, scientific and social dimensions of agroecology. It constitutes the entry point to modules that aim the appropriation of concepts, methods and theories, alongside modules allowing to acquire knowledge on agroecosystems functioning and agroecological engineering. The overall plan is not designed for a single learning path but rather to promote dialogue and feedback between engineering and concepts and to allow for diverse potential learning pathes.







### Overall preview of the Virtual University for Agroecology design in progress unctional ecology to manage Use of legumes crops in rop and grasslands in groecological systems Crop associations groecological systems Typical modules dealing with Typical modules dealing with Agroecosystems functioning Concepts, methods and theories Focusing on organisms, populations and Basic principles of population ecology, communities (pests, plant associations...) landscape ecology, ecophysiology... Focusing on cycles (water, energy, organic Concepts of ecosystemic services, biodiversity, actors and territories... Focusing on systems (plant-soil/plant-animal Tools and methods as to systems assessment, biological functioning, landscape agronomy...) innovation, co-conception... Introductory module « What is agroecology? »\* History background and definitions & The diverse positioning of the agricultural, scientific, and social dimensions of agroecology Typical modules dealing with Agroecological ingeneering Focusing on levers (pest management, fertilization, no-till...) Focusing on systems conception and management (conservation agriculture, agroforestry, farm-sacaping...) groecology in livestok systems Application of agroecology in crop pest management

\* « Qu'est-ce que l'agroécologie? » AgroParisTech, INRA, IRD, AgroCampusOuest, INPT-ENSAT, in collaboration with UVED ( www.ea.inra.fr/uvae)

## **Project dynamics**

The UVAE, which will also feed the Agreenium university on line, is now developing under a dual dynamics regarding production of modules and training based on them. This aims to make the UVAE a space for collective action beyond individual training achievements, towards restrengthening agroecology in agronomic research.