

## **PARMI**

# Promoting AgRoecology transition deMands Innovation in education

#### **ABSTRACT**

- Agricultural systems all over the World face complex problems : natural resource depletion, loss of biodiversity, climate change, increasing food and ecosystemic services demands...
- Agroecology addresses this challenge by designing agroecosystems based on biological regulations (Altieri, 1995; Gliessman, 1990).
- ullet Agroecological systems are knowledge-intensive  $\ \square$  training and education is one of the major limiting factors
- Putting agroecology into training and education is an exciting and difficult challenge: multidisciplinarity (ecological technical and social issues), unstabilized and hybridized knowledge, systemic approach, local and generic knowledge.
- The results of recent projects (ANR PEPITES, PAMPA Formation, EcoHort, Uved) showed that the construction of digital learning resources is a very interesting way to overcome these difficulties (de Tourdonnet, 2014).

Keywords: Quality

Year: 2014

**Project number:** 1401-014

Type of funding: AAP FORMATION

Project type: AAP

Research units in the network:

Start date: 2014-10-01 End date: 2016-09-30 Flagship project: no

**Project leader:** Stephane De tourdonnet **Project leader's institution:** InstitutAgro

Project leader's RU: INNOVATION

**Budget allocated:** 199784 €

Total budget allocated (including co-financing): 199784 €

Funding: Labex

#### **GOAL**

The aim of PARMI is to create, deliver and test innovative pedagogical resources on agroecology, taking advantage of the diversity and complementarity of a consortium, that combines 7 research units from Montpellier, 3 education Departments of SupAgro and the University of Antananarivo.

#### **ACTION**

To analyse the gaps in numeric educational resources on agroecology

To design new digital resources in the form of learning objects

To integrate these objects into a database to facilitate their capitalization and their use in different training pathways.

To use and test these numeric resources in five training situations in the North and the South:

- 1. a summer school in agroecology opened to graduate and PhD students and to researchers;
- 2. course tailored to curricula in Master levels at Montpellier SupAgro



- 3. course tailored to curricula in Master and PhD levels organized by the University of Antananarivo;
- 4. resources tailored for technical education in agriculture;
- 5. a MOOC (Massive Open Online Courses) on agroecology dedicated to a larger audience.

### **RESULTS**

- To structure a scientific community which covers the disciplinary fields necessary to build an interdisciplinary debate and a shared vision of Agroecology.
- To promote knowledge sharing and joint construction of educational resources based on innovative pedagogical tools: e-learning, Mooc, reverse pedagogy...
- To test these pedagogical resources in a wide range of training situations :
- o at different academic-levels: technical training, L, M, D, life-long learning
- o in different contexts: France, Madagascar.