

## 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).
- Agroecological systems are knowledge-intensive □ training and education is one of the major limiting factors
- Putting agroecology into training and education is an exciting and difficult challenge: multidisciplinary (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 :**

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**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.